THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. XLII. SATURDAY, FEBRUARY 3, 1883. No. 5.

ORIGINAL LECTURES.

ON INTRA-LARYNGEAL GROWTHS.

A Clinical Lecture.

BY CLINTON WAGNER, M.D.,

PROFESSOR OF DISEASES OF THE NOSE AND THROAT, NEW YORK POST-GRADUATE MEDICAL SCHOOL; SURGEON-IN-CHIEF TO THE METROPOLITAN THROAT HOSPITAL.

GENTLEMEN: In the pre-laryngoscopic period the presence of laryngeal growths was rarely recognized, owing to the want of means of making an accurate diagnosis. The first case of which we have any record is that of Koderik, in 1759. Brauers, Ryland, Ehrman, Rokitansky, and Horace Green have all published reports of cases before the introduction of the laryngoscope into general practice. But the most interesting of the several treatises are those of Ehrman, in 1850, who published a record of all the well-authenticated cases, twenty-six in number, all of which proved fatal except three. In 1859, Dr. Horace Green, of New York, in an able monograph, gives the entire number of recorded cases as forty; thirty-seven of which resulted fatally. Seven or eight of this number occurred in this country; four in his own practice.

The symptoms show themselves in an alteration of voice, or disturbance of the function of respiration, the act of swallowing, and in some cases cough and pain.

The alteration of the voice may range from slight huskiness to complete aphonia. It will depend upon the size of the growth and its location. If sessile and upon the superior surface of the cord, the voice may undergo no change whatever. If it is attached to the free edge, or overlaps the free edge of either of the cords sufficiently to prevent approximation, there will be complete aphonia. If attached by a pedicle to the under surface of the cord, it may produce aphonia by being thrown upwards and between the cords during phonation or attempted phonation, approximation will be interfered with, and no voice will be produced. The voice sometimes has a peculiar vibratory tone or metallic ring which the ear of the skilled laryngoscopist may frequently detect at once and suspect the presence of a growth, even before making the examination with the mirror. If the growth is in either of the ventricles of the larynx or attached to the ventricular bands, voice may not be interfered with.

Breathing is interfered with in those cases in which the growth has attained sufficient size to lessen materially the calibre of the larynx. The location of the growth may have much to do with the disturbance of respiration. If in the upper part of the larynx on or above the ventricular bands, it is less apt to produce dyspnœa than if lower down and in the glottis proper. A growth which does not ordinarily produce much distress in breathing may seriously impair it if the patient should catch cold, producing congestion of the mucous membrane to any extent. Inspiration is more labored than expiration. If the growth is attached to either of the cords, the respiration is very stridulous and attacks of spasm of the glottis more or less frequent.

The act of swallowing is interfered with should the growth be of large size and attached to the epiglottis or to the posterior wall of the larynx, or overhanging or adjacent to the pharynx.

Cough is not always present, and when it is the growth will probably be found attached by a pedicle and interfering with the movements of the glottis.

Pain is rarely present, and when felt, the growth is usually of malignant character.

A succession of colds which keep up a chronic congestion of the mucous membrane—chronic laryngeal catarrh—is one of the most common causes. Syphilis and tuberculosis have no agency in the production of new formations in the larynx. The professional use, or rather the abuse, of the voice may be assigned as a cause of laryngeal polypi. Persons between the ages of 35 and 50 are most prone to new formations in the larynx. They are sometimes congenital. Dr. Eddis reports a case of an infant that died thirty-seven hours after birth from strangulation produced by a laryngeal polypus. Dr. Causit thinks they are most frequent in infancy, while Dr. Bruns reports a case occurring in a subject seventy-four years old. In my own practice, my youngest case was a boy five years old, from whom I removed a large papilloma; my oldest case, a man sixty-three.

Varieties of growth: benign and malignant.

Benign: papillomata, fibromata, myxomata, cystomata, lipomata, angiomata.

Malignant: sarcomata, epitheliomata.

Papillomata are most frequently met with of the several forms of laryngeal polypi or growths. They are generally multiple, and vary in color from a whitish-pink to a deep red. If thoroughly removed, they are not apt to recur. Sometimes a mere crushing with the forceps will suffice to produce a sloughing or disintegration of what remains. It is claimed that this variety may recur or reappear as a malignant variety if not thoroughly removed. I have had several cases in my own practice which somewhat support this theory. A case whom you have all seen at the Metropolitan Throat Hospital, first came to me in January, 1881, nearly two years ago. At that time there was a growth about the size of a large pea on the right cord, near the anterior commissure. I regarded it as a papilloma, and suggested the removal by the forceps, which could have been done at that time without difficulty. The patient declined, and sought treatment elsewhere. Twelve months later he again consulted me, at which time the whole box of the larynx was almost completely filled with growth. Several large pieces were removed by means of the forceps, but as the growth was found to extend downwards below the cricoid cartilage, and as dyspnœa was becoming more urgent each day, tracheotomy and thyrotomy were performed, the growth removed, and the patient discharged in a few weeks from the hospital. The tumor was submitted to Dr. Heitzman, of this city, for examination, who pronounced it a benign growth of the variety known as papilloma. But in his report he stated that it had grown from a highly inflamed base, and if it recurred it would most likely come as a malignant growth. A few months later, in June, just before I left for Europe, the patient came to me, suffering from great dyspnœa. A large amount of growth had reappeared in the larynx, on the right side. During my absence a canula was introduced into his trachea by a surgeon in Brooklyn; and upon my return I again operated. This time I removed an enormous amount of growth. It involved the whole of the right side of the larynx, and extended below the cricoid cartilage. I found it necessary to remove also several portions of the thyroid cartilage, in order to

secure thorough extirpation of the growth. Its attachments were destroyed by the galvano-cautery. A portion of the tumor which was submitted to Dr. Heitzman for microscopic examination, was pronounced to be epithelioma; thus supporting the theory that a perfectly benign growth may degenerate into a malignant variety, and also confirming the opinion of the microscopist in this particular case, that if a recurrence took place, it would come in a malignant form. Fourteen weeks have now passed since my last operation, and not the slightest trace of the growth can be seen. It is to be hoped, for the patient's sake, that my friend Dr. Heitzman has committed an error in his diagnosis of the tumor. I might add another interesting feature of this case; ossification of the thyroid had taken place, and also of the right arytenoid. In performing the first operation, in using the curette upon the anterior surface of the right arytenoid, I probably destroyed the mucous membrane over the arytenoid by the force it was necessary to use, and also dislocated it from its cricoid attachment. Sloughing must have supervened, for about three weeks after the operation, during a severe fit of coughing, the right arytenoid, completely ossified, was expelled through the mouth. The specimen which I exhibit to you is that of the ossified arytenoid.

The specimen which I exhibit to you in this bottle is a papilloma removed from a child five years of age. The little fellow was admitted into the Metropolitan Throat Hospital about four and a half years ago. He was suffering from alarming dyspnœa, with frequent attacks of spasm of the glottis. An examination revealed a large papilloma attached to the right cord and almost completely filling the box of the larynx, and between the cords posteriorly could be distinctly seen what appeared to be a web of membrane stretched from cord to cord. The child was much reduced in flesh and strength, and thyrotomy was at once decided upon. Tracheotomy was first performed, and immediately afterwards thyrotomy. This growth was removed, the false membrane cut away with the scissors, and the patient put to bed, The membrane was probably the result of an attack of croup which he had had some time before. The boy recovered perfectly and gained rapidly in strength and flesh, and was discharged five weeks after the operation. I saw him some two years later; he was in perfect health and there had been no recurrence of the growth.

Fibromata are the next in frequency. We have the hard and soft variety, the former the most common. Their growth is very slow. They are usually attached by a pedicle, and arise from the submucous cellular tissue or perichondrium.

The specimen which I exhibit to you was removed from a stout, muscular man, aged thirty-six, by occupation a butcher. This growth was attached by a pedicle to the under surface of the right cord at about its junction with the middle and anterior thirds. During quiet breathing, the tumor would drop below the cords and almost disappear from view, but during the act of phonation it was forced upwards and lay upon the surface of the cords or between them. I made several unsuccessful efforts to seize this tumor during quiet respiration. Finally I directed him to make the "ah" sound loudly and forcibly, during which I rapidly introduced the forceps, and caught and severed the entire growth.

The specimen in this bottle is a small fibroma which I removed several weeks ago from a gentleman at my office. It was attached to the free edge of the left cord at its junction with the middle and anterior thirds. His voice was a squeaking falsetto. Immediately upon removing the polypus he recovered his natural deep bass voice.

Myxomata are very rare. Very few cases are on record. Mackenzie, in his extensive practice, has not met with a single case. In the *Archives of Laryngology* for January, 1881, I reported a very interesting case occurring in my practice. The tumor was pronounced by Dr. Heitzman to be a true myxoma, a growth rarely found in the larynx,

Cystomata are of more frequent occurrence. They are usually found upon the epiglottis, sometimes upon the true cords. A cystic growth on the epiglottis which occurred at my clinic at the Metropolitan Throat Hospital, was removed without difficulty by the forceps.

Lipomata, or fatty tumors. There is but one case on record. It occurred in the practice of Dr. Bruns and grew by pedicle from the ventricle, and was of a yellowish-white color.

Angiomata, or vascular growths, are very rare. They resemble a papilloma except in color, which is black. They are very benign in character and not apt to recur if thoroughly removed.

In malignant growths (carcinoma and sarcoma) there is usually more pain, the growth is more rapid in its development, dysphagia and dyspnœa, especially the former, are more marked than in the benign varieties. In the later stages the neighboring submaxillary glands become involved, and after ulceration has taken place there is fetor of the breath, and the expectoration is mingled with a muco-purulent secretion. In the early stages of the malignant form of growth we cannot always diagnosticate them as such. If we could, the operation for removal of the larynx could be performed at a period when the chances of success would become much greater. In my lecture upon syphilis and tuberculosis of the larynx, I mentioned that it was sometimes extremely difficult to differentiate in a given case between syphilis, tuberculosis, and malignant disease of the larynx; even the most experienced may be at a loss to decide. A man called at my office for treatment during my absence in Europe in the summer of 1880, and consulted Dr. Howland, who had charge of my practice. The whole of the anterior surface of the epiglottis was covered with an angry-looking, nodulated, fungoid vegetation, On the left side near the free edge there was slight ulceration, which showed a disposition to extend. The man was fifty-three years of age and had had primary syphilis some thirty years before. The trouble was regarded by Dr. Howland as specific, and he was given iodide of potassium. The ulceration rapidly increased under this drug, which fact, together with the peculiar nodulated appearance of the growth unlike any case of tertiary syphilis that had ever come under my observation, satisfied me that the disease was malignant. I removed the epiglottis by the sub-hyoidean incision and submitted the growth to Dr. Heitzman for microscopical examination, who pronounced it cancer of the epiglottis, of the variety termed epithelioma. The disease returned, and the man died nine months after the operation. This case presents another point of interest, from its being the first operation for the removal of the entire epiglottis of which we have any record. A report of the case was published in the *Medical Record*, May 21, 1881.

Sarcomata of the larynx are not as frequently met with as epitheliomata. They resemble in appearance very much the papillomata, and vary in color from a deep red to yellow, or the pink of the mucous membrane. This specimen, which I have called sarcoma, was so pronounced by an eminent microscopist of this city. Another gentleman of equal eminence, to whom the specimen was submitted, called it a papilloma. And still another an *epithelioma-papilloma*. It began as a small sessile growth on the right cord, the greater portion of which I removed with the forceps. The patient returned to me in about six months, at which time his

larynx presented the appearance already described. I performed tracheotomy, followed immediately by thyrotomy, and removed the growth thoroughly, applying the galvano-cautery. Two months later I was compelled to perform another thyrotomy for the removal of the tumor, which had reappeared. I proposed to him at that time to remove the entire larynx. He objected, and in all I did thyrotomy seven times. He lived two years after the performance of the first. I might add that several months before the end, he expressed a willingness to submit to the removal of the entire larynx, but at that time owing to the engorgement of the cervical glands and the extension of the disease to the trachea, the operation was not considered feasible.

Surgery has taught us that whenever a tumor or new formation interferes with the function of an organ, our duty is to remove the growth if the operation is at all practicable. If the laryngoscope had done nothing more than to enable us to diagnosticate the presence of intra-laryngeal growths, it would rank as one of the greatest of boons to modern surgery. I stated that Dr. Horace Green, in his monograph published in 1859, gave the entire number of recorded cases as forty, thirty-seven of which proved fatal. With the aid the laryngoscope has given us, there is now no reason why a case of benign growth should not be removed, and the functions of the larynx wholly restored before life has become in the slightest degree endangered. Growths may be removed by the endo-laryngeal or the extra-laryngeal method. The former consists of removal by evulsion, by cutting, or crushing. I usually employ Mackenzie's forceps, which I here exhibit to you. They are cutting and crushing, and the blades open either antero-posteriorly or laterally. There are a number of sizes, and about fourteen or fifteen forceps comprise the entire set. I wish to divest this operation (by evulsion) of the manifold risks and dangers supposed to be incurred by the patient and exaggerated by the advocates of so-called conservative surgery. It is an operation attended with little or no danger, and which any one who can introduce a brush properly into the larynx, guided by the mirror, can perform. *Preliminary training in the majority of cases is quite unnecessary.* In Vienna it is the custom, or at least it was some years ago when I was in that city, to submit the patient to training. That is, a laryngeal sound of silver or other metal neatly covered with leather was introduced into the larynx and brought into contact with the growth for many days before the professor attempted the operation. About twelve hours just preceding the operation, applications with the brush of a strong solution of morphia, alternating with chloroform, were made about every half hour. And with all this preparation, I have seen the attempt to remove the growth fail and deferred for another sitting. Bromides internally and locally are also given, and produce an anæsthesia, or rather an insensibility, of the larynx. I hold that if a brush can be introduced into the larynx, the forceps may also be.

I rarely submit the patient to any preliminary training other than introducing the mirror for from five to ten minutes for several days, provided there is irritability of the pharynx. I have frequently removed growths at the first and only introduction of the forceps. My method of introducing them is as follows: I take the largest size laryngeal mirror in my left hand, and in the right hand a pair of forceps adapted, as far as possible, to the particular case in hand. That is, as the distance from the arch of the tongue to the larynx will, of course, vary in different individuals, I employ a pair of forceps longer or shorter in relation to that distance. After introducing them into the mouth, and having the point well back of the epiglottis, I carry them as quickly as possible into the larynx. In other words, I try to surprise the organ; that is, to anticipate the spasm which surely follows the introduction of foreign bodies. It is not always possible to watch the course of the forceps after they have entered, but you must have well in your mind's eye the exact location of the growth. If it is anterior, near the commissure, you direct your forceps to that point. If posterior, you carry your forceps to that part; and so, whether it is on the right or left cord, you give the proper direction. With a little practice—and delicacy of touch can always be acquired by practice—you will be enabled to tell whether or not you have the growth within the grasp of your forceps. Force should never be employed, as it is wholly unnecessary. The instrument is introduced closed and opened after it has reached the glottis. The larger the growth the more easily will removal be accomplished. In regard to the evil results which it is asserted are apt to follow the introduction of the forceps, such as perichondritis, necrosis of the cartilages, ulceration, paralysis, I have never met with such accidents. But I can easily understand how such consequences may be brought about. The forceps should never be introduced for more than three or four times at one sitting, and then, failing to seize the growth, the patient should be sent away, and no further attempt made for several days. A congestion of the mucous membrane may be produced, and a too frequent introduction of the forceps while in that condition may lead to unpleasant results. For that reason I recommend you to be in no haste in the treatment of these cases. I have never seen any good results follow the application of astringents or caustics to intra-laryngeal growths. I have no doubt that many of them could be dissipated by the stronger caustics, such as nitric acid, London paste, caustic potash, chromic acid, etc., but it is impossible to localize the effects of these agents, and consequently their introduction into the larynx is out of the question. The milder caustics, such as nitrate of silver, zinc, iron, or copper salts, are useless. If a patient consults you for hoarseness, and you discover a small growth upon one of his cords and you rely upon brush applications for its removal, you will surely fail. Your assurance to him that the growth will not be apt to increase in size, will not be apt to affect his general health, or interfere with his respiration, will not satisfy him. He will probably seek a surgeon who has the skill to remove it, and you, through your want of confidence in your skill, will lose the treatment of the case.

The extra-laryngeal method, thyrotomy, should never be performed except in those cases in which respiration is seriously impaired. And even in those cases where the growth almost entirely fills the box of the larynx, every effort should be made to remove it *per vias naturales*. It is a capital operation, and is always attended with more or less risk of life. The operation is easy of performance except in those cases in which ossification of the thyroid has taken place, and this usually occurs after forty-five years of age. If tracheotomy is considered necessary previous to thyrotomy in a given case, it should be followed immediately by thyrotomy, and not wait as recommended by some authorities for several weeks. You will only be subjecting your patient to the dangers incurred from two capital operations instead of one, as is the case when both are performed at the same time. Until my last operation for dividing the ossified thyroid I had always used the Hay's saw, but the operation is tedious owing to the difficulty of fixing or steadying the larynx, and it is by no means easy to keep it in the exact median line. In the case of a man upon whom I operated several weeks ago, at the Metropolitan Throat Hospital, I employed a small file-cut

wheel made to revolve by means of the dental engine. I divided the ossified thyroid in an incredibly short space of time, the line of incision was very clean, and the superiority of this instrument over the Hay's or small metacarpal saw, upon which we have been compelled to rely, was clearly demonstrated. I have here a number of instruments; forceps of various kinds, cutting and crushing; as well as a guillotine or circular knife, such as are employed by the throat specialists in Vienna. I consider them inferior in every way to those of Mackenzie, and for that reason I never employ them in my operations. Prof. Rossbach, of Würtzburg, has suggested an operation which consists of introducing a sharp-pointed narrow knife through the median line of the thyroid into the larynx, and then by aid of the mirror introduced into the patient's mouth any growth which may be upon the vocal cords is to be cut off. This operation has been described as a simple one attended with no hemorrhage, and we are told that the patient is unconscious of the presence of the knife in the larynx, and neither retching nor coughing is liable to be excited. If the patient is unconscious of the presence of the knife, the larynx certainly will not be. You will surely have spasm of the glottis, and more or less hemorrhage; it will be utterly impossible to hold the mirror *in situ* from the retching which will be produced; and, in addition to all this, if the knife is permitted to remain in the larynx during the spasm, I can readily conceive that the posterior wall of the larynx and the anterior wall of the pharynx may be cut through. I have never attempted this operation, and never shall, as I consider it wholly impracticable.

ORIGINAL ARTICLES.

NOTE ON A CASE OF ECZEMA OF THE FACE IN AN INFANT.

BY CHARLES W. DULLES, M.D.,
SURGICAL REGISTRAR TO THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

ABOUT a year ago, H. G., an infant, eight months old, fat, but white looking, was brought to me suffering with eczema of the face, having a large patch on each cheek, and one on the chin. The disease was of the papulo-squamous type, the surface being rough, somewhat elevated in spots, and of a red or brownish-red tinge, according to the temperature of the air. It had now lasted some months, and the child's parents had little hope of having a cure effected. With this in view, I gave a guarded prognosis, and tried my hand at the little boy. I worked away from March 2 to April 28—nearly two months—with diluted iodine ointment, zinc ointment, white precipitate ointment, cod-liver oil and calomel and zinc ointment mixed, locally; and internally, with castor oil and rhubarb, till I had the bowels in fine condition. But all accomplished only temporary and trifling results. At this juncture, one day, with the child before me, it occurred to me to try the effect of removing the cuticle and stimulating the deeper layers of the skin with the tincture of iodine. I at once put this idea into execution, making, on April 28, a limited experiment on the chin, to begin with. This worked well, and I then, on May 8, tried it on the chin and one cheek. These both did well, and on May 26 I painted all three places with equally happy effect. After each application of the iodine desquamation occurred, and the improvement was marked. By June 5 the face was cured, and there has been no recurrence of the disorder in the six months which have since elapsed.

I have been led to narrate this case because I find, on inquiry of some of my friends who are specialists in dermatology, that the line of treatment last employed, which was novel to me, is also novel to them. I am told that a similar method is not uncommonly followed in obstinate, long-established, and indurated eczemas of adults, but that it has not been recognized as applicable to eczemas in very young persons.

It certainly worked admirably in the present case, getting rid of the red, dry, rough and scaly patches on both cheeks and chin, which had been of the most disfiguring character. And when next I encounter like conditions, I shall not postpone having recourse to it till after I have tried the methods usually recommended, but use it at first.

One of my friends, an experienced specialist, to whom I spoke of the treatment while I was employing it, said he would hesitate to use the tincture of iodine undiluted on the face of an infant, for fear it would prove too irritating. This fear, however, was not realized in my case. The remedy did no harm, was easy to apply, required no change of dressings or trouble on the part of the mother, and it was followed by a prompt and permanent cure.

THE REACTION OF DEGENERATION.

BY G. BETTON MASSEY, M.D.,
ELECTRO-THERAPEUTIST AND ASSISTANT PHYSICIAN TO THE PHILADELPHIA ORTHOPÆDIC HOSPITAL AND INFIRMARY FOR NERVOUS DISEASES.

THE value of electricity as an aid in the differential diagnosis of various forms of paralysis is quite considerable, and is largely owing to recent investigations into the behavior of muscular tissue under the influence of the poles of a galvanic battery. Under certain well-determined conditions a variation in this response is clearly and readily found, and points unerringly to a change that can have no higher seat than the trophic centre of the affected muscle, thus immediately excluding all possibility of a cerebral origin of the malady, and, as we shall see directly, being of still further aid in narrowing down our inquiry into the probable seat of the paralysis.

This "reaction of degeneration" of muscular tissue to galvanism was first observed by Brenner, and afterwards by Erb, the latter making quite an elaborate study of the subject, and first suggesting the name by which it is now known.

During several years past I have been much interested in an attempt to verify these statements of Prof. Erb in the abundance of material to be found at the electric clinics of the Infirmary. The result has been a complete confirmation of the existence of the reaction, and of its claims upon the attention of the profession.

In obtaining this reaction a reasonable amount of dexterity and circumspection is necessary, but its

recognition is by no means sufficiently difficult to deter the most inexperienced manipulator from the attempt. The hazy description of the phenemenon by the specialists who have mentioned it, is, therefore, much matter for wonder.

In this article nothing will be said of the action of the faradic current; it is also assumed that the reader will understand that the galvanic current is only to be taken into consideration at the opening and closing of the circuit, as it is then only, under ordinary circumstances, that any contraction of muscle occurs.

First, it is to be clearly understood that the reaction of nerve trunks and of muscular tissue should be sharply distinguished. Quantitative changes of excitability (increase or diminution of the response without change of the normal formula given below) occur alike in nerves and muscles, but it is in muscles only that these peculiar changes of a qualitative character occur; and it is because we cannot eliminate the intra-muscular nerve twigs from a participation in the polarity induced in the surrounding muscular tissue by the superimposed pole that we sometimes find it difficult to detect the slighter degrees of qualitative change—the true behavior of the muscle being masked, as it were, by the greater excitability of the nervous tissue. To thus confine the influence of the pole whose action we wish to test to the tissue of the muscle chiefly, it is evident that some attention should be paid to topographical anatomy. Similar considerations should also guide us in selecting a position for the opposite, indifferent, pole. It is usually recommended by those who have written on the subject to place the indifferent pole on the sternum; this, however, is unwise beyond the fact of its rather painful character, as contractions of most of the muscles of the limb are apt to be produced by the current in its course from the chest towards the opposite pole. Experience has suggested to the writer that it is far better to select a contiguous tendinous or bony spot as the position of the indifferent pole. In the examination of the tibialis anticus muscle, for instance, the patella forms a good point of departure, as also for the quadriceps extensor. Some attention to the point of departure is absolutely essential to a correct examination.

Having placed one well-moistened electrode over the muscle to be tested, and the other in some carefully selected point of departure, it next becomes necessary to properly close and open the circuit. For this purpose nothing is in any way comparable to a pedal rheotome, a simple mechanism worked by the foot; it is, in fact, a necessity whenever the services of an assistant cannot be obtained, as a steady application of the electrodes is essential in many delicate cases—even the slightest movement produced by the working of the hand-current-breaker being confusing. If the pedal rheotome also contains a commutator, worked by the foot, for changing the poles while still *in situ*, its handiness will be greatly increased. The clockwork current-breakers usually furnished by instrument makers are totally unfit for diagnostic purposes, since the current should be completely under the control of the operator.

The normal reaction of the galvanic current in muscle is as follows: With a medium strength of current (15 to 20 sulpho-chromic cells, or 25 to 35 bluestone cells, in accordance with the temporary condition of the battery), there is a decided contraction at the closure of the circuit with the kathode, or negative pole, on the muscle. On changing the poles by means of the commutator, thus bringing the anode, or positive pole, over the muscle, we obtain a slight contraction at the closure. There are no contractions at the opening of the circuit with either pole. In other words, the normal condition presents a stronger kathodal closing contraction and a weaker anodal closing contraction. This, simply stated, is the key to the whole matter; but, simple and easily verified as it is, it yet has been more than once overlooked or misinterpreted by electro-therapeutists. Erb[1] states that with an intermediate grade of current the kathode causes a strong contraction on closure, but none on opening the circuit. "The anode, on the other hand, causes feeble contraction, both when the current is closed and when it is opened, the degree of contraction being nearly the same in both cases, though sometimes the one and sometimes the other may be somewhat the stronger, or may show itself more promptly." Whether the muscular tissue of an American, under the stimulus of anelectrotonus, acts differently from the Teutonic fibre or not I cannot say; but I am certain that not even our German-American citizens present that sort of anodal response. I can only explain his statement by the supposition that he paid but little attention to the point of departure. Dr. Bartholow[2] has fallen into even a more serious error when he states that the anode causes contractions chiefly on opening the circuit. If he had but tested the thenar eminence of his left hand, a moment would have sufficed to show him his error. The mistaken estimate of the action of the anode by both authors is really unaccountable, as it is clearly evident to any experimenter that the anodal closing contraction is much stronger always than the anodal opening contraction—in fact, that it is obtained usually by a strength of current that will show no motion whatever at the opening.

To repeat: with a medium current we obtain good kathodal closing contraction, slight anodal closing contraction, and no motion whatever at either kathodal opening or anodal opening.

The great strength of current required to bring the opening contractions in health makes the operation a painful one, and is apt to precipitate volitional interference with the electro-motility; but, to make the statement complete, it may be added that in increasing the current strength to the point of giving great pain, it is said that we may obtain an anodal opening contraction, and with a still higher strength, kathodal opening contraction.

Now the "Reaction of Degeneration" consists

[1] Ziemssen's Cyclop., vol. xi. p. 273.
[2] Bartholow's Medical Electricity, p. 117.

merely in a more or less perfect reversal of the above formula. The anodal closure then causes a stronger contraction than the kathodal closure. This is readily demonstrated in all typical cases. A less degree of degeneration may be present, however, and shown in but a slight increase of anodal closing over kathodal closing contraction. A still less degree may be present and indicated by an equality of the two closing contractions, and yet this would still be an unerring sign of the presence of the qualitative change in question.

In recording the notes of cases at the Infirmary, it has been found very convenient to use the formula recommended by Erb, which consists in the use of the initials of the German words employed to describe the reaction. Thus the formula of the normal reaction, kathodal closure: stronger contraction, anodal closure: weaker contraction, may be recorded by the letters Ka.S.Z.; An.Sz.; Ka. and An. representing kathode and anode respectively, S. representing *Schliessung*, closure, and Z. *Zuckung*, contraction. The relative strength of the contraction is best represented by a large or small Z. Other symbols that may possibly be needed are, O., *Oeffnung*, opening of circuit, and Te., *Tetany*, or prolonged contraction. There are at least two good reasons why the initials of the German words should be retained in English formulas rather than the translated initials, viz., the necessity we would be under to assign different meanings to the same letter in the translation; and, secondly, the established usage of the German formula in European scientific works, including some British authors.

It has been found by Erb that this change in the response of the muscle to galvanism is accompanied by, and coincident with, a change in the nutrition of the muscular elements themselves. After section of a motor or mixed nerve, an atrophy of the muscular fibres immediately sets in. It may be seen during the course of the second week. It consists in a narrowing of the fibres, which may possibly reduce them to one-half their width in five or six weeks. The transverse striæ become less distinct, there is a notable increase in the muscle nuclei, and it is even said that a chemical change may be demonstrated in the contractile substance. It is at this time (from two to six weeks after the paralysis) that the reaction of degeneration may be found at its height. It is accompanied by an absolute quantitative increase of galvanic response, and total absence of farado-contractility. From this time on the degenerative response lessens in amount and distinctness, in accordance with the relative increase of connective tissue, until finally the trophic control is reëstablished over the part, with a gradually returning normal reaction; or, in hopeless cases, a sclerotic atrophy, representing the débris of muscle, presents a final and permanent obstacle to any and all forms of motility. Thus the difficulty at times experienced in obtaining the degenerative response in cases where it should be found may be due to the lateness of the stage of paralysis at the time of examination. In such cases an earlier examination would have undoubtedly disclosed the change.

As to the diagnostic value of this sign, we have already some positive data. It is to be found in all cases of traumatic paralysis depending on injuries to nerve trunks. In fact, all peripheral paralyses of nerves due to neuritis, or other lesions acting upon nerves after their exit from the brain or spinal cord, such as compression by tumors, extravasation of blood, etc., will show the abnormal response in the early stages. Of this class may be mentioned facial paralysis, the various artisans' palsies, and local spasms due to neuritis from over-use, such as scrivener's palsy or cramp, telegrapher's palsy or cramp, seamstresses' palsy, pianist's palsy, etc., together with the worst forms of paralysis from compression, as, for instance, the musculo-spiral paralysis not infrequently contracted by drunkards while sleeping with the head resting on the arm. It occurs also in lead palsy, and in infantile paralysis.

With the exception of the last-mentioned two affections, all examples of its presence are strictly confined to diseases in which considerable anatomical changes exist in the nerves. In reference to the exceptions—lead paralysis and infantile spinal paralysis (*i. e.*, polio-myelitis anterior acuta of either children or adults) it may be mentioned that they consist essentially of disease of both the gray matter of the cord and of the muscles themselves—the relative importance of which is still under discussion among pathologists—and are accompanied by great trophic disturbance. With these exceptions, therefore, the occurrence of the reaction of degeneration points most positively to a peripheral disease of the nerve trunks, or of the conductors of trophic influence within the cord, and excludes the possibility of brain disease, thus, in most cases, having important bearings upon our prognosis.

In view of the above facts, together with the statement that the reaction is normal in progressive muscular atrophy as long as any muscular tissue is left, I would suggest that the true explanation of the phenomenon is closely connected with a study of the conductors of trophic influence and the effect of interference with or abolition of their functions as conductors.

Some practical hints bearing upon treatment are the following: In all cases of paralysis of motility showing this qualitative change there is more or less total loss of response to faradism. Galvanism should therefore be preferred to faradism as a therapeutic agent. Since also the anode or positive pole becomes the most active, it should be given the choice of position in applications to the muscles.

1632 ARCH STREET.

HOSPITAL NOTES.

BOSTON CITY HOSPITAL.

(Service of W. C. B. FIFIELD, M.D.)

FRACTURE OF THE OS CALCIS OF EACH FOOT; DEATH FROM EMBOLISM ON THE TWELFTH DAY; AUTOPSY.

(Reported by ROYAL WHITMAN, M.D., House Surgeon.)

THE patient, a robust German, was brought to the hospital September 19, 1882. While being drawn up a shaft in a bucket, the rope broke, and he fell a distance of about eighteen feet, striking upon his feet.

Examination showed the following injuries: Several incised wounds of the face. Upon the inner aspect of the right ankle, immediately below the malleolus, was an incised wound about two inches in length. Upon the introduction of the finger, a compound, comminuted fracture of the inner aspect of the os calcis, immediately below the articulation with the astragalus, was detected, the cancellous structure of the bone being exposed, but not injured to any extent. Several small fragments of bone were removed, and the wound was dressed with carbolized gauze.

The left ankle and lower leg were swollen, discolored, and tender on pressure. There was indistinct crepitus about the ankle, and apparently a slight outward displacement of the foot. No change in the contour of the heel was discovered, and a positive diagnosis as to the position of the fracture was not made, though it was thought to be a fracture of the outer malleolus. The leg was placed in a fracture-box, and hot fomentations applied to the ankle.

During the following week the patient progressed favorably. The swelling about the left ankle persisted, and several blebs formed upon the leg. There was a slight amount of suppuration about the compound fracture of the right foot, but no pain or swelling. On the afternoon of October 20, the swelling of the left ankle having subsided, a roller plaster bandage was applied.

In about one-half hour after its application the house surgeon was called, and found the patient in a state of extreme cyanosis, pulse rapid, feeble and irregular, expression anxious, face covered with cold perspiration, respiration sixty to the minute, and gasping in character. The patient complained of great pain in the cardiac region, and said that he was dying. Air entered the lungs freely. The foot of the bed was raised and subcutaneous injections of brandy and ether were given, but without effect. The patient rapidly grew worse, and died in about fifteen minutes after the first symptom.

Autopsy (eighteen hours after death).—There was a fracture of the inner aspect of the right os calcis, as has been described, an area about three-fourths of an inch in diameter of the cancellous structure of the bone being exposed. No injury of the neighboring bones or soft parts.

The left foot was then examined, and the os calcis was found to be completely smashed. The superior surface, articulating with the astragalus, was firmly impacted into the surface to which the tendo Achillis is attached. This portion of the bone was also fractured in various directions, though the fragments were not separated. The remainder of the bone was broken into several fragments. The surrounding soft parts were considerably lacerated and the adjacent veins filled with thrombi. No other bones of the foot or leg were injured.

The lungs were then examined and the main pulmonary arteries were found to be almost completely occluded by thrombi.

REMARKS.—Fracture of the os calcis of both feet is an extremely rare accident; but two cases of it having been reported—one by Malgaigne, and the other by Voillemier.

Malgaigne speaks of the difficulty in making a diagnosis of the injury, and says that it is most often mistaken for fracture of the fibula on account of the pain and swelling about the ankle. Recovery is usually slow, and considerable disability often results.

Embolism, as a cause of death in fractures, is not mentioned in the prominent works on surgery. The only mention of this complication that I am able to find is as follows:

"Azam, of Bordeaux, first wrote upon this subject in 1865. He has demonstrated that thrombosis, which may also accompany a great variety of injuries and inflammatory diseases of the limbs, is particularly liable to occur about fractures of the leg. The intimate relations which exist between the bones and the tibial and peroneal veins explain the frequency of its occurrence. Embolism, the results of which are so serious, is a consequence of thrombosis, and is of much more common occurrence than is generally believed. In all ages, surgeons have noticed cases of sudden death, most frequently occurring after fractures of the lower leg. They have explained these deaths by pretended serous or nervous apoplexies, convenient and pompous explanations, but devoid of sense; and had Azam done nothing more than to demonstrate in a single case the stupidity of such explanations, he would have accomplished something, for the discovery of a positive fact is never in vain, but always of practical importance."—*Noveau dictionnaire de Medecine et de chirurgie.*

MEDICAL PROGRESS.

LIGATURE OF THE BROAD LIGAMENTS AS A SUBSTITUTE FOR CASTRATION IN CASES OF UTERINE FIBROMYOMA.—DR. GIOVANI COSENTINA reports the case of a married women aged 36, with an interstitial fibroid tumor of the uterus, who suffered from an almost continuous uterine hemorrhage, and in whom all the ordinary remedies had been tried without success. The case seemed to be a suitable one for the removal of the ovaries, the operation for which was decided upon, and even commenced. From the difficulty in detaching the ovaries, which were adherent to the uterine walls, and with the idea that perhaps the hemorrhage might be caused by the immense congestion of the veins of the ligament, the right broad ligament and Fallopian tube were ligated. The wound in the abdomen healed readily, and the woman was discharged. Two months later she returned, and it was found that the tumor had greatly reduced in size, and the hemorrhages had diminished in frequency and severity.—*Journ. de Méd. de Paris*, December 23, 1882.

THE MICRO-ORGANISM OF WHOOPING-COUGH.—DR. CARL BURGER describes an organism which he has found in the sputa of patients with whooping-cough, which are so constant in their appearance in this disease, while never to be seen under other circumstances, that he believes there must be some etiological reason for their presence, particularly since the intensity of the disease depends upon the number of the organisms present. He has not yet reported the results of the culture-experiments with which he is at present occupied.

These organisms are readily detected by simple staining with watery aniline solutions, and may be prepared in the same manner as employed by Koch in the case of the bacillus tuberculosis. Dr. Burger describes them as ovoidal rods, about twice as long as broad, with a slight constriction around their middle; occasionally they are met with in chains and groups, and by their difference in size and shape can be readily distinguished from the spores of *Leptothrix buccalis.*—*Berliner klin. Woch.*, January 1, 1883.

REMOVAL OF GOITRE.—In the *Deutsche Medizin. Zeitung*, No. 42, an abstract of a case of extirpation of a goitre, performed by Von Riedel, is given, which is unusual in the fact that symptoms supposed to be due to some affection of the vagus occurred soon after the operation. Aphonia, with rapid pulse and dyspnœa, set in within two hours after the operation.

Tracheotomy failed to relieve the dyspnœa. Four days later, pneumonia was detected, and the patient succumbed. At the autopsy the recurrent nerves were found to be embedded in blood-clot; there was also commencing suppurative inflammation of the mediastinum, and lobular pneumonia. Von Riedel puts the vagus symptoms down to the use of a two per cent. solution of carbolic acid with which the wound was washed out. He has seen one other similar case. The facts of the case are interesting, but we think the explanation not free from objections.—*Medical Times and Gazette*, December 23, 1883.

FATTY HYPERTROPHIC CIRRHOSIS WITH ICTERUS.—DR. MERKLEN reports two cases of the above nature which occurred under the service of Prof. Vulpian. From an analysis of their symptoms and the lesions detected post mortem, he draws the following conclusions:

1. The icterus in cases of fatty hypertrophic cirrhosis is the consequence of an acute or sub-acute diffuse intra-lobular hepatitis, which, by the abundant formation of embryonal cells which it causes, arrests the flow of bile in the lobule.

2. The intensity of the icterus is dependent upon the integrity of the hepatic cells, and is less marked when their fatty degeneration is complete.—*Rev. de Méd.*, December 10, 1882.

TREATMENT OF HEMORRHOIDS.—DR. GAVOY has employed the following plan of treatment in rebellious cases of hemorrhoids: it consists in freezing the hemorrhoidal vessels, and so causing an isolated arrest of the circulation. To accomplish this the base of the tumor is surrounded by a thread so as to arrest the circulation; the surface of the tumor is then touched with a piece of ice which is held there for some time; by this treatment the tumor becomes greatly reduced in size. It is not necessary to anæsthetize the patient; the treatment is also efficacious in cases of erectile tumors.—*Journ. de Méd. de Paris*, Dec. 30, 1882.

NEW OPERATION FOR RUPTURED PERINEUM.—At the meeting of the Obstetrical Society of London, held December 6, 1882, a paper on this subject was read by DR. WYNN WILLIAMS. In this operation the sides of the rent were first denuded in the usual way; then a flap of elastic tissue about two-thirds of an inch in width, about two lines in thickness, and long enough when on the stretch to reach as high as the denuded surface on the labia, was dissected up from the floor of the vagina. Sutures were then passed through the denuded surfaces in such a manner as to keep the edges as well as the flat surfaces of this flap in contact with the raw surface. This being done, the sutures were secured in the usual way. When the rupture involved the sphincter ani, the flap was made, and the sutures passed through it in the same way as in the simpler case, but the rent in the wall of the rectum was sewn up with sutures made to terminate within the bowel, and the deep sutures secured before those bringing the flap into position were tied.—*Lancet*, December 30, 1882.

POISONING BY PYROGALLIC ACID.—DR. ERNEST BESNIER reports four cases in which friction with an ointment of pyrogallic acid in cases of psoriasis produced marked symptoms of poisoning. The most severe symptoms were produced suddenly in all cases: hæmoglobinuria and hæmaturia, violent diarrhœa, and pulmonary œdema, accompanied by great collapse; death resulted in two cases. Dr. Besnier believes that the most satisfactory treatment of such conditions is to administer hypodermic injections of ether, inspiration of oxygen, and the free administration of alcohol in small and repeated doses, combined with revulsives, such as cold wraps applied to the skin.—*Ann. de Dermatol. et de Syphilog.*, December 25, 1882.

NEW OPERATION FOR SPINA BIFIDA.—At the meeting of the Leeds and West-Riding Medico-Chirurgical Society held December 1st, MR. A. W. MAYO-ROBSON showed a child, six weeks old, upon whom, when six days old, he had performed a new operation for spina bifida. The redundant parts removed by the operation were also shown. After the removal of these parts, and after stitching up the arachnoid over the spinal canal, periosteum from a rabbit was inserted between the meninges and the skin so as to cover the gap in the bones. The wound had perfectly healed; the skin over the lumbar region was quite level; there seemed to be no tenderness on pressure; the child looked strong and healthy. The sac, examined by Mr. F. H. Mayo, was found to be of the size and shape of half a swan's egg; the wall consisting of true skin and subcutaneous tissue lined by serous membrane. At one point the sac was very thin and transparent, appearing to consist only of the serous membrane covered by a thin layer of epidermis, when fresh minute bloodvessels could be seen to ramify over it. Mr. Robson drew attention to the following points: 1, the operation was performed with full antiseptic precautions, eucalyptous air being used instead of carbolic spray; 2, the meninges were closed by uniting the serous surfaces, as in peritoneal surgery; 3, the transplantation of living periosteum and its continued vitality; it had not yet, however, formed new bone; but already the covering of the canal had a greater than mere skin-firmness; 4, the entire absence of bad symptoms in the child, operated upon at so early an age, was noticed.—*British Medical Journal*, December 30, 1882.

PULSATION OF THE SPLEEN IN AORTIC INCOMPETENCE.—It would appear that this sign of aortic incompetence has not been previously described. Attention has now been drawn to it by Dr. Gerhardt, in the *Zeits. für klin. Med.*, IV., S. 449, without any attempt being made to magnify the importance of the phenomenon. We are familiar with pulsation in the smallest vessels of many of the visible parts of the body in aortic incompetence, including the bed of the nails; and Quincke has shown how the two factors necessary for its production are, relaxation of the vascular walls, and sudden great variation in the blood-pressure, such as occurs in aortic regurgitation. In Gerhardt's three cases the spleen was large and the patients in high fever. The splenic tumor swelled during cardiac systole, expanding gradually, and diminished in size again during diastole. A dull double sound was audible over the tumor, apparently distinct from the cardiac murmurs which could be made out at the upper part of the tumor. To the finger the pulsation had not the characters of an aneurism, but was of the nature of a soft swelling, very much as in pulsating jugulars. The sign appears to be not entirely without some prognostic value, inasmuch as it indicates a sound condition of the left ventricular walls, and compensation, as far as possible, of the valvular inadequacy.—*Medical Times and Gazette*, December 23, 1882.

ARTERIO-VENOUS ANEURISM.—At the meeting of the Société de Chirurgie, held Dec. 6, 1882, M. POLAILLON read a report of a case of an arterio-venous aneurism which became purely arterial by the obliteration of the vein which communicated with the artery. The disease occurred in a man who, when 11 years old, had

accidentally cut himself in the bend of the arm with a pen-knife. An aneurismal tumor of the size of a small nut resulted, and remained without change for forty-two years, when it suddenly increased in size, and caused intense œdema of the arm and forearm, and rupture appeared imminent; the radial pulse could not be felt. The arm was amputated and antiseptic dressings applied. The operation resulted favorably. The examination of the tumor, after turning out the fibrinous clots, showed that it had been an arterio-venous aneurism, but that the humeral vein had become obliterated up to the shoulder, while the humeral artery was atheromatous; the obliteration of the vein was evidently due to phlebitis and thrombosis.—*L'Union Médicale*, December 12, 1882.

PURULENT PERITONITIS; LAPAROTOMY; CURE.—ANTON SCHMIDT, of Moscow, reports a case of purulent peritonitis occurring in a man, aged 21 years, during convalescence from an attack of relapsing fever. The abdominal cavity was opened by an incision extending from the navel to the pubis, and about five pounds of pus removed. Careful drainage was established, but no injections were employed; a Lister dressing was used. Cure occurred without any complications other than occasional attacks of colic.—*Centralb. f. Chirurg.*, November 25, 1882.

LOCALIZATION OF ARTICULATE SPEECH.—At the meeting of the French Academy of Medicine, held Dec. 12, 1882, DR. BILOT presented a memoir on the seat and direction of the capsular radiations whose function is concerned in the transmission of speech. The author believes that, according to his researches, the opinion of Bouillaud, who accorded no more importance in this connection to one frontal lobe than to the other, is more nearly correct than that of Dax and Broca, according to whom the left side alone is functionally concerned with articulated language. If the frontal lobe is not, strictly speaking, the governing organ of speech, it nevertheless contains the agents charged with its transmission. The memoir was referred to a commission, composed of MM. Vulpian and Mathias Duval.—*Gazette Hebdomadaire*, Dec. 15, 1882.

ERGOT IN DIABETES INSIPIDUS.—DR. ALFRED CARTER, in the *Birmingham Medical Review* for December (No. 52), gives a brief account of a trial of ergot of rye in diabetes insipidus. The patient was a little girl aged six, who had suffered from her complaint for about twelve months, probably, before she came under observation. The treatment lasted over a period of three months, including a fortnight in the early part during which the drug was suspended. The liquid extract was the preparation used, at first in doses of fifteen minims taken three times daily, afterward gradually raised until no less than nine drachms a day were being administered. He arrives at the opinion that ergot had no notable effect in diminishing the flow of urine for the following reasons: 1. The flow increased for the first three weeks, though ergot was taken. 2. Ergot was resumed after its withdrawal for a fortnight; yet the average flow during the four following days was sixteen ounces in excess of the daily average during the period of suspension. 3. Though the daily flow during the last two months was materially less on the whole than before, yet toward the end of this period it increased some sixteen ounces beyond the average of the earlier part, though at the same time the dose of ergot was systematically increased. 4. On the final suspension of the ergot the daily average diminished at first, and did not afterwards exceed the average flow during the time that no less than nine drachms of the extract were being taken daily. 5. Such improvement as did occur appeared to be more closely related to the improvement of general nutrition than to anything else. We think it is evident, then, that ergot may be added to the somewhat long list of drugs which exert no beneficial influence on this formidable malady.—*Med. Times and Gaz.*, Dec. 23, 1882.

NEW REMEDY FOR SYPHILIS.—PROF. LIEBREICH brought forward, at the last meeting but one of the Berlin Medical Society, a new drug for the treatment of syphilis by the subcutaneous method. This drug rejoices in the name of hydrargyrum formidatum, and is, therefore, merely a different form of the old cure for syphilis. The mode of its preparation was not stated; chemically, it belongs to the amide group, in whose structure the monovalent amidogen (NH_2) plays an important part. Liebreich was led to think of this new preparation from the notion that the ordinary amides of the body, of which urea may be regarded as the principal one, pass out of the organism in an undecomposed state; when, however, an amide is in combination with a metal, decomposition readily occurs, and the metal is reduced and deposited. Liebreich repeated his experiments before the Society, and showed that these conjectures were quite true for the metal mercury. It is supposed, therefore, that the formamide of mercury, after the hypodermic injection, undergoes disintegration; and so the mercury is set free, and is able to exert its well-known power over the lesions of syphilis. The preparation is easily soluble in water, is of neutral reaction, does not coagulate albumen, is not precipitated by caustic soda, and the presence of mercury can be demonstrated by means of sulphide of potassium. The drug, when injected under the skin, produces its effects very surely and rapidly. This is not regarded as a disadvantage, for the medicine is said to be easily borne, and has never produced salivation in Liebreich's hands. There is very little pain attendant on the injection, which has never excited any inflammation. From a half to a whole of a Pravaz syringeful (a one per cent. watery solution) may be injected twice or thrice daily. Liebreich looks on the preparation as the best we yet have for subcutaneous injection.—*Med. Times and Gaz.*, January 6, 1883.

SYMMETRICAL GANGRENE OF THE EXTREMITIES.—At the Pathological Society of London, on December 5th, the body of a child, which presented a most remarkable example of this rare condition, was shown by Dr. Southey. The body was that of a well-nourished girl, aged two years and a half. A few months ago, she had a "feverish attack," which was accompanied by some purpuric spots on the limbs. On November 13th, another slight feverish attack occurred, and lasted three days. The child remained in good health up to the afternoon of December 1st; she then complained of headache; on the following morning, she appeared quite well. In the afternoon, she complained to her father that she had "hurt her legs." He rubbed the backs of her calves, but this increased the pain; and he noticed that the skin in that situation was livid; soon after, she vomited, complained of headache, and was "feverish." At 6 P.M. on that day (December 2d), she was worse, the patches on the calves were blacker, and were extending up and down the calves; the parents also noticed, at this time, that the backs of the arms were becoming affected in a similar way. At 6 A.M. on the following morning, it was noticed that the buttocks had become livid. At noon on December 3d, she was admitted into St. Bartholomew's Hospital in a moribund condition; the pulse at the wrist was feeble, somewhat wiry, but could be counted. The tibial pulse could not be felt. The patches of lividity felt hard and tough; the lungs and heart ap-

peared to be quite healthy; liquid nourishment, brandy and milk, were taken, but soon vomited as a rule; two doses of nitro-glycerine were also given, but immediately vomited. At 7 P.M., a convulsion occurred; up to this time, intelligence had been preserved; but, after this, convulsions became very frequent, and she died at 11.45 P.M., on December 3d; the whole duration of the case was thus not much over thirty-two hours. The necropsy had been made by Dr. Norman Moore, but no coarse lesion could be found in the viscera. He had examined the femoral and other arteries of the left lower limb, but had found no embolus. The parts affected were the legs, in almost their whole extent, the buttocks and the neighboring part of the back, the backs of the arms, and the cheeks; the lesions were remarkably symmetrical. A theory to account for these cases, of which Dr. Southey had seen three or four, but none so well marked as this, had been put forward by M. Reynaud, who supposed that there was a spasm of the arteries, with subsequent migration of blood-corpuscles, and transudation into the skin.—*Brit. Med. Journ.*, December 9, 1882.

EXTIRPATION OF KIDNEY.—At the meeting of the Sheffield Medico Chirurgical Society, held December 7, 1882, DR. KEELING showed a large tumor of the right kidney which he had removed, at the Jessop Hospital, by a front abdominal incision from an unmarried woman, aged 23, on August 10, 1882. The tumor was thought to be ovarian in the first instance, its real nature not being ascertained until the peritoneal cavity had been opened. The stump of the tumor, consisting of the pelvis of the kidney and the renal vessels, was secured by catgut ligatures, and a long drainage-tube was placed in the track of the wound. The hemorrhage in the latter part of the operation was severe, and the patient almost pulseless when carried to bed. Convalescence was retarded by profuse suppuration and diarrhœa. The wound was finally healed on the thirty-eighth day; the patient had now (four months after the operation) completely recovered. The tumor was cystic in its character, with strong fibrous walls, continuous, apparently, with the capsule of the kidney. It was developed on the concave aspect of the gland, and the kidney itself, otherwise but little altered in appearance, was flattened out on the back of the tumor. It had been growing for more than three years, but had not given rise to any kidney symptoms.—*British Medical Journal*, December 30, 1882.

IPECACUANHA AS AN OXYTOCIC.—DR. PITKIN confirms the assertion that ipecacuanha administered during tedious labor will augment the energy of the uterine contractions, and reports a case in support of his statement.—*Journ. de Méd. de Paris*, Dec. 2, 1882.

SOME CURIOUS LAPAROTOMIES.—ROSENBACH (*Gaz. Méd. de Strasbourg*, No. 11, 1882) reports the following cases:

1. Extirpation of a cancer of the rectum extending high into the pelvis; detached by abdominal incision, and removed through the anus. The abdomen was opened directly above Poupart's ligament, the sigmoid flexure drawn out, and divided between two ligatures; the upper end of the divided gut was then sutured in the abdominal wound, to form an artificial anus, and the lower end was disinfected and returned, after division of the mesentery, to the abdominal cavity. The abdominal wound was then closed, and the rectum extirpated through the anus. Drainage was carried on through the perineal wound, which was not closed, but stuffed with iodoform gauze. Death occurred from collapse on the second day.

2. Operation for a distended gall-bladder containing a large number of calculi. The tumor occurred in a girl aged seven years; had existed for two years; was the size of the fist, and was situated in the right half of the abdomen; distinct fluctuation could be detected. The abdomen was opened, and the gall-bladder stitched to the edges of the abdominal wound. Ten days afterward the gall-bladder was opened, and a large quantity of clear, mucous fluid removed, and about forty calculi. Cure occurred without any febrile reaction.

3. Extraction of biliary calculi through an abdominal incision. Cure resulted in spite of the fact that several calculi were lost in the peritoneal cavity.

4. Retro-visceral dermoid cyst. Laparotomy to the left of the umbilicus. As the cyst could not be removed, the abdominal wound was closed, and the cyst sutured to it and then opened. Cure took place without febrile reaction.

5. Laparotomy for congenital retro-peritoneal tumor; neuroma of the solar ganglion. (Result not stated.)

6. Laparotomy for intestinal obstruction from compression by an abscess of the pancreas. (Result not stated.)—*Journ. de Méd. de Paris*, Jan. 6, 1883.

LITHOLAPAXY IN INDIA.—DR. P. J. FREYER states in the *Indian Medical Gazette* for December, 1882, that he has employed this operation in ten cases, and he is so thoroughly satisfied with its results in every respect that he has now decided on practically abandoning lithotomy in the adult in favor of the new operation, except in cases of large and hard calculi, and when the case is complicated by stricture. In all cases he introduees a morphia suppository immediately after the operation, and gives ten grains of quinine internally as soon as the patient recovers consciousness. He thinks this plan aids in warding off urethral fever. He believes that litholapaxy will become very popular in India, where the natives are averse to any mode of treatment that involves a series of several distinct surgical operations.

GENERAL PROGRESSIVE MUSCULAR ATROPHY WITH PARALYTIC LUMBAR LORDOSIS.—DR. LUDWIG LANGER reports a remarkable case of progressive muscular atrophy leading to paralytic lumbar lordosis, which is especially interesting from the extreme distortion of the skeleton produced, leading to the supposition, at first sight, that the case must be one of some disease of the bones. It is further clinically interesting from the high degree of development of the characteristic symptoms, and, anatomically, it brought into prominence the action of numerous groups of muscles which ordinarily are not accessible to study.—*Deutsches Arch. f. klin. Med.*, December 18, 1882.

DIAGNOSIS OF TUBERCULAR ULCERATION OF THE LARYNX.—At a recent meeting of the Berlin Medical Society, DR. FRANKEL made an interesting communication on this subject. He believes that in a large number of cases the lenticular tubercular ulcer is quite characteristic. The tubercle is found completely beneath the epithelium and sets up an ulceration, which, in general, tends to spread to the surface; the borders are not sharp, but they can be always recognized by their sloping character from new filtration with recent granulations; the bottom of the ulcer is lardaceous. The ulcer is surrounded by an inflammatory zone, in which deposits of miliary tubercle can also be recognized.

In many cases, however, the ulcer does not have sufficiently distinct characteristics to permit of a diagnosis without the accessory information drawn from auscultation and percussion.—*Rev. Mens. de Laryn. d' Otol. et de Rhinol.*, January, 1883.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will be liberally paid for upon publication. When necessary to elucidate the text, illustrations will be furnished without cost to the author. Editor's Address, No. 1004 Walnut St., Philadelphia.

SUBSCRIPTION PRICE, INCLUDING POSTAGE,

PER ANNUM, IN ADVANCE, ... $5.00.

SINGLE COPIES, ... 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address, HENRY C. LEA'S SON & CO.,
NOS. 706 & 708 SANSOM STREET,
PHILADELPHIA, PA.

SATURDAY, FEBRUARY 3, 1883.

STATE BOARDS OF HEALTH.

IT seems strange that any argument should be required at the present time in favor of the establishment of State Boards of Health; yet such would appear to be the case, if we may judge from the hesitancy with which legislators approach the subject, and their repeated failures to adopt salutary laws, even when endorsed and urged by those best qualified to judge of their character and importance. As an example of culpable indifference and neglect, in staving off from year to year a measure which has elsewhere been demonstrated to be of unquestionable advantage to the health and well-being of the people, the State of Pennsylvania assumes an unenviable prominence.

Annually, for years, the Legislature of this State has had before it a bill creating a State Board of Health, but it has always failed to enact it into a law. At the present time such a bill is again pending, the passage of which, in its main features, is earnestly desired by sanitarians and philanthropists, not only in this Commonwealth, but in the adjoining States, many of which have already been provided with central boards of health, and have a common interest in all measures tending to prevent the spread of disease.

Without a department of public health a State government is deficient in its organization. Agriculture, education, finance, law, fish culture, and the like, are all objects of which the State properly takes cognizance; but what sufficient reason is there for ignoring the equally important obligation to care for and protect the health of her citizens?

The establishment of a State Board of Health is necessary for the collection and preservation of vital statistics. Apart from their essential value as records for future reference in studying some of the great problems of the human family, they will be of immediate and indispensable importance as a guide in searching for the causes which undermine the health and jeopardize the prosperity of the people. One of the most important functions of such a board is that of sanitary investigation and research upon questions affecting the health and life of citizens of the Commonwealth. No better proof of the advantages resulting from the performance of these duties need be presented, than that furnished by the instructive reports of the boards of health of the States of Massachusetts and Michigan.

It should be the duty of the State Board to foster and encourage the study of the preventable causes of disease, and the application of the remedies; to discover the needs of the people with respect to sanitary laws, and to suggest, explain, and recommend the appropriate legislation; to represent and guard the interest of the whole State in national and inter-state sanitary legislation and conferences; and to act as a central bureau for the collection, record, preservation, and dissemination of valuable information on all subjects pertaining to the health and life of the people.

As a medium of communication and of concerted action between local boards of health, and of aiding such boards in the suppression of nuisances when the cause is beyond their jurisdiction, as, for example, in case of defilement of streams and water supplies, such an organization will prove to be of the utmost advantage.

We trust that the members of the Legislature of Pennsylvania will recognize the truth of the old Latin motto, "*salus populi suprema est lex*," and that they will no longer allow the State to occupy the unenviable position of being one of the nine States in the Union which remain without a State Board of Health to investigate, supervise, and advise in the interests of the life and health of the citizens of the Commonwealth.

ANASARCA ACCOMPANYING TYPHOID FEVER.

ANASARCA accompanying typhoid fever appears to be a rare condition in the hospitals of Paris, for M. Leudet has not met a single case in that city in a service of six years, while, curiously enough, he observed eight in the Hôtel Dieu of Rouen, in a short space of time; and Griesinger noted it in one-fourth of the cases of a typhus (typhoid?) epidemic in Germany in 1857. It was also noted by the earlier English physicians, by Magnus Huss in an epidemic in Sweden in 1855, and by Virchow in an epidemic in Upper Silesia in 1849. The occur-

rence in the hospital service of M. Millard, of a case of typhoid fever, in which, after a profuse intestinal hemorrhage on the seventeenth day, there supervened, suddenly, general anasarca without albuminuria, has led M. Ch. Eloy, in a recent number of *L'Union Médicale*, to carefully study the entire subject.

Four classes of cases of dropsy complicating typhoid fever have been observed:

1st. Local and partial œdema, resulting from thrombosis. Such are the cases of thrombosis of the internal saphenous or other veins of the lower extremity, resulting in *phlegmasia alba dolens*, or milk leg, which are by no means confined to typhoid fever, but may occur in any cachectic state.

2d. Anasarca with nephritis, of which Traube reported a remarkable case, in which the œdema was confined to the hands and feet, accompanied by suppuration of the kidney, and believed to have been due to typhoid fever. Such an origin was denied by Rayer, but Griesinger, Frerichs, Rilliet and Barthez, and others still, have observed remarkable alteration of the kidney in this disease. We have ourselves met an instance of this complication—nephritis—which gravely threatened an unfavorable termination of the case, but the patient ultimately recovered.

3d. Anasarca and serous dropsy *with* albuminuria, noted by Griesinger, Harley, and others. In the experience of the former they occurred in the third week, and with the latter on the thirty-fifth day after the beginning of convalescence. In the last case, febrile phenomena and desquamation accompanied the invasion of the anasarca; and in some cases were noted an abundance of sudamina, and sometimes a true miliary eruption. The instance occurring as late as the thirty-fifth day after convalescence began, ushered by fever and desquamation, we should be inclined to consider independent of the typhoid attack, from which it was so far separated. Further we can see no reason for separating the second and third categories. Both must be the result of a renal complication, and seem to differ only in the seat of the dropsy.

4th. Anasarca and serous dropsy *without* albuminuria, occurring in the third week, coincidently with defervescence—the case related by M. Eloy being of this class, which is also the most common, since out of eight cases of the dropsy, albuminuria was absent in six. It is often preceded by copious perspiration or diarrhœa; sometimes by a profuse enterorrhagia, as in the case reported; at others by a pulmonary accident, as bronchitis or pleuro-pneumonia, that is to say, some debilitating cause; and, in general, the subject is a feeble one, and the type of the fever adynamic. Usually the approach is sudden, and for the most part without fever. The urine is commonly increased in quantity, but otherwise normal. The anasarca is not confined to the connective tissue, but may, though rarely, invade the pleura or peritoneum. Its effect upon prognosis is not, as a rule, more serious than to retard convalescence.

As to the pathogenesis of these conditions, neither cold nor geographical peculiarities are sufficient to account for them, and it would seem necessary to admit a morbid condition of all the tissues of the organism, and a dyscrasic state of the blood, provoked in some one of the ways alluded to, or by unfavorable surroundings, as those of famine, poverty, and confinement in prisons, etc. That conditions of the blood have much to do with them is proved by the fact that anasarcas have succeeded upon repeated bleeding in the course of typhoid fever. It is needless to say that a restorative and tonic treatment is indicated.

GAMBETTA—HIS MODE OF DYING.

THE lesions disclosed at the autopsy of Gambetta serve to illustrate some interesting and important pathological questions. The perityphlitis, colitis, and the localized peritonitis, whilst the immediate cause of death, were accidents only, arising in the course of a constitutional state. His habits of life were sedentary, and he was addicted to the pleasures of the table. A member of the *bourgeoise* class, whose ancestors were compelled, by the stress of circumstances, to adopt a frugal life, he inherited their constitutional peculiarities. The changed conditions of life as he rose into political importance, and the indulgences which he permitted himself, induced obesity and a depraved condition of his fluids and solids. One of the results of these causes was the development of glycosuria—of that form of the malady associated with a vigorous state of the nutritive functions. Such subjects grow very fat, eat enormously, and pursue sedentary occupations. The condition of glycosuria is not constant, it is rather intermittent, and diet and exercise have a very pronounced effect in causing the disappearance of the sugar. Such subjects, it is now known, may continue for many years to present this congeries of symptoms. Whilst they may not experience very pronounced symptoms from this cause, and may continue for a long time fair, fat, and flabby, they are peculiarly liable to intercurrent diseases of a formidable kind—to serous and parenchymatous inflammations. Such was Gambetta's fate. Confined indoors by a wound, and doubtless poisoned from this source, he experienced an intercurrent inflammation. His system was poorly prepared to resist the inroads of such a malady. His tissues were flabby, watery, fatty, and his vital resources, therefore, at the minimum.

Such a case is a whole series of moral homilies. To the physician the moral is—inculcate the art of right-living, for the secret of prevention consists in the adaptation of the personal hygiene to the peculiar state of the social conditions. We leave to the moralist the lessons appropriate to such a termination of such a life.

THE NATIONAL ASSOCIATION FOR THE PROTECTION OF THE INSANE.

A SMALL number of eccentrics meet semi-annually to discuss the problems connected with the care of the insane. What purpose, soever, may ostensibly claim their attention, the one subject to occupy them is, the abuses of asylum management. They wish everything changed, but, like iconoclasts in general, they are more apt at breaking up than constructing. They are more especially concerned that admissions to asylums should be more difficult—desiring to avoid the incarceration of sane persons, which they affect to believe is very frequent. During the proceedings of the meeting in which the remarkable paper referred to below, was read, a severe rebuke was administered to the authors of these reckless assertions by a former member of the State Board of Charities, who affirmed that, as a result of many years' observation of asylums in Pennsylvania, he had never known of a single instance of the incarceration of a sane person. Dr. John L. Atlee, of Lancaster, confirmed Mr. Well's vigorous statements, and twenty-five years' service as a trustee of the Harrisburg Asylum surely has given him the right to speak authoritatively.

A very remarkable paper was read by a clerical gentleman who may be fitly characterized as a "reverend idol." He held forth on the duty of the sane to the insane. We learn that he belongs to the group of sensational preachers—moral teachers, who are nothing if not startling; who deal in epigram, in antithesis, in paradox, in climax and anti-climax, in any rhetorical clap-trap which will startle their hearers. His paper was a sensational sermon, read in the deepest of clerical bass, and with a manner compounded of pertness, self-sufficiency, and affected modesty, which he has found effective, doubtless, in his congregation of adorers. Too wise a man was he to perplex his audience with weighty problems. He contented himself with portraying the horrors of asylums, the fatal ease with which the sane are incarcerated, and the barbarities of the medical profession. He exhibited a sublime disregard of facts. He began by asserting that insanity was a disease of modern civilization only, that it divided with the "ubiquitous malaria" the attention of physicians, that asylums were dreadfully mismanaged, and that the sane were easily shut up in these monstrous prisons without possibility of escape, condemned to endure perpetual wrongs. He did not instance a single example of a sane person confined in an asylum, although he was not the less confident of the existence of such cases. The chief actors in these iniquitous proceedings are the doctors. They give the certificates on which the victims are confined, a doctor, as an asylum superintendent, holds the hapless subject a prisoner, and doctors are willing witnesses to support any enormity, if properly paid.

All this, and much more, did the "reverend idol" pour forth with self-satisfied consciousness. When his paper was ended interest in the proceedings ceased for him, and he retired, leaving the audience to digest at their leisure his platitudes, and his sonorous but empty paragraphs. The insane who need protection have little hope when defended by such an advocate. "What went ye out for to see? A reed shaken by the wind?"

CARDIACENTESIS.

THE inquiring spirit of the times is well exhibited in the novelty and boldness which characterize the surgical expedients now carried out, or proposed. To reach eminence quickly, the young surgeon must startle. He must explode, so to speak, under the ancient surgical edifice, a cask of dynamite, to awaken the inmates of this conservative institution to a realization of the tremendous revolution going on about them. When these old fellows talk about Sir Astley Cooper tying the abdominal aorta, they are stunned by the intelligence that Billroth removes the larynx, and substitutes a rubber counterfeit, and takes out as much of the stomach as happens to inconvenience the patient. It has not yet been proposed to remove a damaged heart, and substitute a sound bullock's heart; but this operative procedure, as bold as it may appear, is approximated to by the scheme to tap the heart itself, when the venous system is overloaded.

This new operation of cardiacentesis was recently advocated by a New York surgeon. The proposition is to tap the right auricle, and draw off sufficient blood to relieve an overloaded state of the venous system. The reasons, therefore, are conclusive.

> "Whatever skeptic could enquire for;
> For every WHY he had a wherefore."

The small difficulties in the way of this brilliant operation are of little moment compared with the magnificent *coup de théâtre* of the procedure itself. What matters it if any of the great venous trunks are perforated? It is true, when a needle is inserted the movements of the heart must widen the orifice made. An inhibiting ganglion might be irritated, with the effect to slow the already laboring organ.

A motor ganglion might be perforated, suddenly cutting off the nervous force generated by it.

To urge such objections as these, is to indicate a woful lack of that progressive spirit exhibited by modern surgery. Such objectors are inveterate old fogies, who must be abandoned to their idols, as incapable of a higher order of surgical achievements. There are physicians, also, who object to tapping the right auricle, on the ground that the venous system may be unloaded by opening a vein in the arm. A physician who entertains such an opinion is simply incapable of appreciating the triumphs of surgery, and may be classed with those surgeons who are so hopelessly conservative as to prefer some trivial operation to a grand *coup*, which whilst it may end the career of the hapless patient, starts the surgeon on a course of brilliant operative methods.

THE DANGERS OF SEWER GAS.

THE *New York Times* of January 24th has an article upon the dangers of sewer gas, etc., in which Memphis is cited as an example of increase of disease following the introduction of sewers. This article has been prepared without any regard to the facts of the case, very much after the manner of an anti-vaccination pamphlet. It commences by stating that the Memphis system of sewage was constructed under the superintendence of Major Benyaurd, U. S. Army, when in fact Major Benyaurd had nothing whatever to do with the construction, which was effected in part under the direction of Col. George E. Waring, and part under that of the City Engineer. It goes on to say that the result has been a settled and apparently consequent increase of the ratio of mortality, and that the deaths from dysentery have doubled, and those from diphtheria have more than quadrupled. From this it concludes that "it would really seem as if they are right who contend that no ingenuity of trap, valve, or ventilation, no matter how carefully executed in every detail, can prevent the percolation of noxious gases into a dwelling house that is directly connected with sewage mains. It is an assured fact that since the attention of sanitary engineers has been especially directed to this subject in this City [New York], tracing back the agitation for the last three years, there has been a steady increase in the annual ratio of mortality. There have been no great epidemics to account for this fact, tenement and apartment houses have been steadily improving in sanitary provisions, the streets have been kept cleaner than before, our recent structures have comprised all the requisites of good plumbing and good engineering, and yet, as in Memphis, dysentery and diphtheria have obstinately persisted in strengthening their hold. . . Until the present system of direct connection [of our sleeping-rooms with the sewage mains] was adopted, diphtheria was infrequent, and dysentery a rare disease, and it is fair to infer that their recent prevalence is in some manner due to the later mode of building."

The truth is, that diphtheria has been a rare cause of death in Memphis. The diseases to which the largest number of deaths in Memphis during the last three years have been due, are consumption, pneumonia, diarrhœa, and dysentery, and a group of diseases among infants, more especially the colored, variously reported as debility, marasmus, inanition, etc. The prevalence of bowel diseases in Memphis is no doubt connected with its water supply, which is very impure. In short, so far as the records of deaths in Memphis for the last three years have been published, they do not indicate that the sewers have caused disease, except in one way—viz., that the outlet of the sewerage is so situated with reference to the water-works, that at times some of the sewerage is probably mingled with the water supply.

With regard to the statement that recent structures in New York City "have comprised all the requisites of good plumbing and good engineering," etc., the reports of the inspectors of the Board of Health, and the records of trials of "skin plumbers" published in the columns of *The Sanitary Engineer* tell a very different story.

THE PRICE OF SANITARY CORDONS.

FROM the Report on Quarantine for the year 1882, by Dr. R. M. Swearingen, Health Officer of the State of Texas, we learn that to invest the fever district and confine the infection to its narrow boundaries, a double line of guards were stationed, one along the Arroyo Colorado, a stream encircling Brownsville on the east and north, and about thirty miles distant, and the other reaching along the railway between Corpus Christi and Laredo. "The expenses of these extensive lines were necessarily great. September 30 the Marine-Hospital Service had paid out twenty-six thousand eight hundred and fifty-five dollars, and the expenses all told, up to the date that quarantine was raised, must have aggregated sixty-five or seventy thousand dollars." Dr. Swearingen continues, "The good accomplished, however, can not be estimated by dollars and cents. The fact that the epidemic was confined to one place in Texas, while it desolated ranches and towns for hundreds of miles up the Rio Grande on the Mexican side, is strong evidence that the money was not squandered uselessly."

The result may justify the expenditure, but we must not forget that at the same time Pensacola

was suffering from a similar epidemic, and that the disease was confined to one place in Florida without any expenditure for the payment of guards to confine it. In 1879, when a terrible epidemic raged in Memphis, and lesser outbreaks existed in New Orleans, in the Teche country, and various points elsewhere, the disease was confined to these numerous foci at an aggregate cost considerably less than was incurred at this one locality in Texas.

It is true that the Texan cordon guarded a long line of river, but this was done incidentally. The line did not extend along the Rio Grande, but at such a distance in the interior as would have been necessary had Brownsville alone been under guard. The establishment of a close guard is open to the objection of shutting up the whole population in an infected city, thus precluding the application of one of the most rational measures of protection, that, namely, of prompt depopulation, while a cordon placed advisedly at thirty or more miles distance costs sixty-five or seventy thousand dollars.

REVIEWS.

SYPHILIS. BY V. CORNIL. TRANSLATED, WITH NOTES AND ADDITIONS, BY J. HENRY C. SIMES, M.D., and J. WILLIAM WHITE, M.D. 8vo. pp. 461. Philadelphia: Henry C. Lea's Son & Co.

THE reader of this book will find that, despite the long-continued and careful study bestowed upon syphilis, there are yet many things very far from being settled concerning it. If he has adopted the dualistic theory made familiar to American readers by the work of the lamented Bumstead, he will receive somewhat of a shock when he discovers that, while M. Cornil, in common with many other reliable authorities, is a staunch dualist, his American editors incline to believe in the common origin of chancre and chancroid. It will be impossible for him to resist the conviction that Drs. Simes and White in presenting their view reflect the opinions of a small, but growing number of syphilographers; and while he will probably conclude that the correctness of the position of the unicists is by no means established, it will be impossible for a fair-minded man to resist the conviction that neither theory by itself is adequate to explain all the questions which arise. The result of a careful perusal of this volume must be to leave the mind of the student in a somewhat chaotic condition concerning the nature of syphilis. Indeed, when he observes that M. Cornil is a dualist, and that his editors, to say the least, incline to the opposing theory, the reader may almost despair of himself arriving at a fixed state of mind in the matter. Yet, however disagreeable a state of incertitude may be, it is the attitude becoming the true scientist. It might be thought that the time devoted to the accumulation of observed facts had been sufficiently long, and that we might now begin to generalize with safety; but a survey of this book will at once convince that the end is not yet, and that we must yet be prepared to receive further facts, and that the nature of the syphilitic poison, in common with that of tuberculosis, and many constitutional affections, is still undetermined.

The additions of Drs. Simes and White are very considerable, as well as of great importance. The translation has been very well done, and the translators have made some most judicious alterations in the arrangement of the work. A distinguishing feature of the book is the attention paid to histological details and the visceral lesions of syphilis. We know of no work which is of equal value in either of these respects. It is a book which must be studied by every one who desires to acquaint himself with the views of the day concerning syphilis, a disease which seems to be of ever-increasing importance as a factor in the history and well-being of man.

It is to be hoped that Drs. Simes and White may see fit to prepare an independent work of their own upon the subject, which would seem to be warranted by the number and value of their additions to M. Cornil's lectures, and which would more fully bring their opinions before the profession, unhampered by their attitude of commentators.

THE BUSY PHYSICIAN'S VISITING LIST, CLINICAL AID, AND POCKET LEDGER. Detroit: Geo. S. Davis, Medical Publisher.

THIS new candidate for professional favor, as an aid to the daily life of the doctor, has much merit. It is adapted to any date, and can be used both for the daily record of engagements and for an account book. It has calenders, obstetric and annual, metric tables, and rules for the treatment of emergencies, points in differential diagnosis, a list of new remedies, etc. Although we are generally opposed to pocket-books, which aim to provide the physician with medical knowledge, we must praise the good judgment and skill displayed in the preparation of this work. We can recommend it to our readers, as a most useful pocket-book.

SOCIETY PROCEEDINGS.

NEW YORK SURGICAL SOCIETY.

Stated Meeting January 9, 1883.

THE PRESIDENT, T. M. MARKOE, M.D., IN THE CHAIR.

EXCISION OF THE KNEE-JOINT.

DR. C. T. POORE presented three patients upon whom he had performed excision of the knee-joint. All the operations were performed with the circular incision. The antiseptic spray was not used. The wounds were thoroughly washed out with a solution of carbolic acid, one to forty. The bones were sutured together with wire sutures, and drainage-tubes passed through the anterior flap around the joint and out through the popliteal space. To secure immobility, the limb was placed on a posterior splint, and a plaster-of-Paris bandage applied from the toes to the groin, an interval being left at the point of operation.

The first patient was a boy, sixteen years of age, with a rather poor family history. He had pulpy disease of both knee-joints. In the right, the tibia was dislocated backwards and flexed at a right angle with the femur. The right knee-joint was excised in 1879, and the result was firm union of the tibia and femur, with two inches shortening. At the time of dismissal from the hospital, he had quite good flexion of the left knee, and was able to act as an assistant to a surveyor, which compelled him to do considerable walking. Last summer he fell and injured the left knee. This was followed by swelling and pains, and it had left that joint stiff in a straight position. Notwithstanding this he was able to walk very well.

The second patient was a girl, thirteen years of age, who fell and injured the left knee-joint six years ago.

The injury was immediately followed by swelling and pain, and six weeks subsequently an abscess formed, which was opened in Bellevue Hospital. She was subsequently a patient at Roosevelt Hospital, where several large abscesses formed about the joint and the lower portion of the thigh, and were opened. She left there considerably improved, but with the limb flexed at nearly a right angle. She subsequently was admitted to St. Mary's Hospital, where Dr. Poore operated upon her in May, 1882, by removing a V-shaped portion of the lower extremity of the femur. There was considerable shortening after the operation, and there still remained a small external ulceration, but no exposed bone.

The third patient was a boy, who had suffered with abscess from Pott's disease, and also had ostitis of the head of the tibia, which opened into the joint. Excision was performed in the usual way, and there was nothing peculiar concerning the subsequent progress of the case, except that on the following day the temperature arose to 105.5° F., but fell to the normal within a few hours, and afterwards there were no unfavorable symptoms except the occurrence of a small slough upon one side of the joint, for which Dr. Poore was unable to account. In this case there still remained a small sinus, into which a probe could be introduced, but he was unable to detect any rough bone.

Dr. Poore had also operated upon another similar case, and expected that the patient would be present, but for some reason was absent. In all the cases the wounds healed promptly, and all the patients were up on the fortieth day.

FIBRO-SARCOMA OF THE PAROTID.

DR. SANDS presented a patient who illustrated the act that in the case of tumors which are unpromising n character, occasionally the disease does not return after removal, or, at least, for a very long period. This man, now thirty years of age, came under his notice in June, 1870. At that time there was a tumor in the parotid region, which was believed to involve the parotid gland. It was situated upon the right side, occupied the entire parotid region, and formed a rather low but extensive growth, which caused prominence of the ear, was exceedingly firm and entirely immovable. It had then been growing for about five months. The case was regarded as unfavorable on account of the rapidity of the growth of the tumor, and the extent and firmness of its adhesions to the deep parts, as well as to the skin. Dr. Sands decided, however, to attempt to extirpate it. When the flaps of skin had been raised, a small portion of the growth was removed, and was examined with the microscope by Dr. Delafield, who found it to be a fibro-sarcoma. The piece removed contained a large proportion of fibrous tissue, with cell elements of a round shape. The diagnosis was confirmed by the subsequent examination of the tumor after its removal. The tumor extended into the deeper portion of the neck, and was attached to the styloid process, and was so incorporated with the adjacent tissue as to make the operation very unsatisfactory. The under surface of the skin was invaded by the morbid growth, being completely incorporated with the whitish tissue of the tumor. Notwithstanding the difficulty of the operation, the patient made a good recovery. Some sloughing of the cutaneous flaps occurred, but beyond this no accident followed the operation, and the patient left the hospital six weeks afterwards with the wound healed. Before the operation the facial nerve was intact, but immediately afterwards the parts supplied by it were found to be completely paralyzed. The paralysis still remains, although it is hardly noticeable when the features are in repose. Dr. Sands had watched the case with a great deal of interest, and made his last note about one year ago, at which time there was no evidence of recurrence of the disease. About three months ago the patient discovered some swellings upon the right side of the neck, and now there can be felt six or eight flat movable tumors extending along the posterior edge of the sterno mastoid muscle down to the clavicle, the largest being about an inch in breadth and length, and about half an inch in thickness. They are very firm, being in this respect like the original tumor. The skin in the neighborhood of the operation seemed to be sound.

DR. MCBURNEY then read a paper on

TRACHEOTOMY AS A PRELIMINARY TO CERTAIN OPERATIONS.

The operations which are referred to in the title of this paper are operations for the removal of the upper or lower jaws, particularly when these parts are involved in the growth of large tumors; operations for the removal of large or vascular naso-pharyngeal polypi, or of tumors springing from the tonsils or walls of the pharynx, or tongue, or palate; and also operations which involve the extirpation of the entire tongue, or of the larynx and adjacent parts; in fact, all operations in the course of which considerable risk is run of having blood or diseased material pass into the lungs or stomach. The old method, so frequently made use of before the introduction of anæsthetics, and still recommended by some, of placing the patient in the sitting posture with the head upright, or hanging forward, offers certainly very slight advantage. Some of the blood lost will, to be sure, flow out of the mouth, but the tendency of such blood as finds its way backwards to pass down the trachea and œsophagus is greater in this position than in any other. Moreover, the difficulty of retaining a patient who is under the influence of an anæsthetic in this position, and the awkwardness of applying artificial respiration, or of doing tracheotomy if suddenly demanded in the course of the operation, and the greater liability to syncope, form very serious objections to it.

Rose's position, or the hanging head, was an ingenious device, undoubtedly applicable to certain cases. Rose placed the patient with the head and neck projecting beyond the end of the operating table, allowing the head to fall so far backwards that its vertex pointed to the floor. The naso-pharyngeal cavity then becomes a cup placed on a lower level than the orifices of the trachea and œsophagus, and blood collecting in it flows more readily out of the nose, provided the nares do not become plugged with clots, than down the pharynx. From this cup-shaped dependent cavity blood can be sponged and readily removed. This position appears to me to recommend itself in cases where hemorrhage will probably not be great, and where the seat of the operation is the palate or mouth, as in cases of cleft palate, or where portions only of the jaws are to be removed without external incisions. But in cases where hemorrhage is very great, or the disease to be removed involves the naso-pharyngeal cavity itself, the Rose position favors the accumulation of blood at the very place where it is most objectionable. Moreover, patients are not infrequently met with who behave very badly when thus placed while under the influence of an anæsthetic, the tension of the larynx and trachea apparently producing a spasm of the glottis which becomes dangerous if not relieved.

Both the upright and hanging head positions are exceedingly awkward in the administration of the anæsthetic, it being necessary to remove the cone as soon as the operation is begun, and to interrupt the opera-

tion at intervals in order to give more anæsthetic. This last is a serious objection, for not only is the operation much prolonged, but blood is frequently lost in large quantities while the mouth and nose are concealed from view. The gravity of extensive and bloody operations about the mouth and adjacent parts has been frequently illustrated in the last few years, not a few such operations having resulted fatally to the patient, either at the time of operation or within a few days thereafter. Moreover, the nature of the disease for which most of these operations are undertaken requires that they should be performed not only with expedition, but with great thoroughness.

I do not know who first suggested a preliminary tracheotomy in the class of cases which I have referred to, but to Trendelenburg is due the credit of giving to the profession an apparatus complete enough to be of very great service in such cases. The original device consisted of a tracheal tube, surrounded in the tracheal portion with a thin rubber bag, which could be sufficiently inflated, by means of a connected bulb, to completely fill the trachea. To the outer end of the tracheal tube an elastic one, several feet in length, was fitted, at the free extremity of which was a reservoir to receive the anæsthetic. The objections to this instrument, as so arranged, are several. In the first place, if the rubber bag was overdistended, which might easily happen, it might burst, or could force its way down so as to close the lower end of the tube. This latter accident occurred to me in one case, and gave considerable trouble. The tracheas of some patients do not bear well the lateral pressure of the bag, violent cough being induced when it is distended. This I have also seen occur. To remedy the first objection, as well as to get rid of the outer bulb, and to obtain greater nicety in fitting the trachea, Dr. Friedrich Lange devised the instrument already shown to this Society. It seems to me to fulfil the indications for either temporarily or permanently tamponing the trachea better than any which I have seen.

Michael, of Hamburg, surrounds the canula with compressed sponge. Over the canula and sponge he places a sack of gold-beater's skin, soaked in a solution of rubber. A little water having been thrown into this sack, the sponge swells and effectually closes the lumen of the trachea. Dr. Foulis, of Glasgow, in extirpating the larynx, tamponed the upper end of the divided trachea with a lead canula which was surrounded with a rubber ring, thus completely closing the air tube and effectually preventing the passage of blood into it.

Dr. Lange recommends in similar cases a leaden canula surrounded with punk, which material is light, and does not allow of the passage of fluids through it. These cases, however, hardly come under the head of preliminary tracheotomy, tamponing of the trachea being necessarily done in the course of the operation. The objects of the preliminary operation are several. Firstly, to prevent the passage of blood down the trachea. Secondly, to facilitate the continuous and safe administration of the anæsthetic. Thirdly, to avoid the possibility of being called upon in the course of the operation to open the windpipe under forced and adverse circumstances. Fourthly, to permit of a continuous, rapid, and *complete* operative procedure, and thus avoid much unnecessary loss of blood. Fifthly, to secure to the patient after the operation an abundant supply of air which is not contaminated by the discharges from the seat of operation.

The passage of blood down the trachea is a danger which always threatens in bloody operations about the upper air passages, and enough fatalities have occurred from this cause to make its prevention worthy of consideration, death having been produced on the operating table, and pneumonia having been produced in other cases from the entrance of blood into the air cells. The unnoticed loss of blood is, in some cases, very great, where the operator depends upon the sponging out the larynx during the operation, blood passing down the trachea, and more especially down the œsophagus, in large quantities. When the trachea is tamponed so as to permit of a continuous administration of the anæsthetic through the canula, this loss of blood can be largely avoided, for continuous pressure can be kept up upon the bleeding points during the course of a long operation, which of course can not be done where the anæsthetic is being repeatedly administered through the mouth and nose. The continuous and safe administration of the anæsthetic has also the great advantage of not only saving time in operating, and, hence, some exhaustion to the patient, but of permitting the operator to deliberately carry out his dissection. In cases of malignant disease, as of the upper jaw, tongue, and pharynx, complete extirpation of the disease is far more likely to be attained where the tracheal tube is used than when it is not; of course, a less rapid recurrence of the disease would then be expected.

The advantages claimed for the preliminary operation can be obtained in a manner somewhat different from, and in my opinion better than, that proposed by Trendelenburg. Instead of the long and heavy tube used by Trendelenburg, one very like an ordinary tracheal tube may be used, into the outer end of which the tube to conduct the anæsthetic from the reservoir can then be fitted. It is not necessary to tampon the trachea itself, as the same effect may be efficiently obtained by packing the lower part of the pharynx with a sufficiently large sponge, to which a string is attached to facilitate its removal. Kocher recommends this plan, but I first saw this method made use of by Dr. George A. Peters, and I have seen it used by others and have used it myself with complete success. It is not perfect, however, for sponge, no matter how tightly packed, will permit of the passage of fluid. I would suggest, as an improvement on the ordinary sponge packing, a sponge covered about half with thin rubber. The rubber side being pushed down and covering the whole lower surface of the sponge, would prevent any drainage through.

There are some questions in regard to the preliminary operation which I am not able to satisfactorily answer to myself. Firstly, is there any advantage gained by doing the tracheotomy some time in advance of the primary operation? Max Schüller, in his monograph on extirpation of the larynx, recommends that the tracheotomy be done some weeks in advance, and claims that by so doing the risks of subsequent pneumonia and bronchitis are lessened. Out of fifteen cases of extirpation of the larynx which Schüller collected, five died of pneumonia, and one suffered from severe bronchitis. But I am not able to satisfy myself that any real advantage would be gained by doing the tracheotomy a long time beforehand, except in cases where the difficulty of breathing through the normal passages caused great impairment of health.

In answer to another question, I think a more positive reply can be made. How long shall the tube be kept in position after the operation?

It should of course be left in all cases where there is reason to fear that the upper orifice of the larynx may become occluded by inflammatory swelling. But another reason for retaining the tube in position is to enable the patient to obtain a supply of pure air during the suppurative stage. Kocher not only keeps the tracheal tube in, but also the sponge tampon in the pharynx, the sponge being soaked in a five per cent.

solution of carbolic acid and removed only to allow the patient to feed. This method also enables the surgeon to treat the wound nearly antiseptically, the nostrils being plugged, the mouth closed though drained into a tube, and frequent washings of the whole cavity being resorted to. I am inclined to think that the comfort and safety of the patient would be increased by following this method in all extensive operations. Michael, Schüller, and others, also claim that by keeping up for some time this permanent closure of the larynx, patients are much less likely to suffer from (Schluck) pneumonia, or foreign-body pneumonia. I have myself made use of a preliminary tracheotomy but three times. In one of these the Trendelenburg apparatus gave me great trouble in consequence of the extreme elasticity of the rubber bag, which folded over the end of the canula when it was distended. In the other two cases for removal of naso-pharyngeal polypi, I made use of a simple canula, and plugged the lower part of the pharynx with sponge. This method gave me great satisfaction.

DR. POST said he had performed preliminary tracheotomy three times; twice upon the same subject after a long interval. In two out of the three times the operation was performed without the introduction of the tube, according to the method of Dr. Martin, of Boston, which he had found very satisfactory. He introduced a large sponge into the fauces, and only a few drops of blood escaped into the trachea. With the open trachea he found it very easy to sponge out whatever blood might enter. He had found great facility in performing tracheotomy as a preliminary operation, and believed that all the advantages which Dr. McBurney had attributed to the operation are derived from it, and that there was no additional risk from performing it.

DR. G. A. PETERS had performed preliminary tracheotomy three times. In one case he had used Trendelenburg's tube. Having seen the difficulties which Dr. McBurney had mentioned concerning the use of this tube, Dr. Peters had had the instrument modified, and supposed that he had gotten rid of the danger, but he then found that another troublesome symptom resulted; namely, a persistent coughing the moment the bag was distended, although he had taken pains to measure the exact amount of air which was necessary to distend the bag up to a certain point. After that, he threw Trendelenburg's tube aside entirely, and had since used only an ordinary tracheal tube, stuffing the fauces with sponge. This method had given him much satisfaction. The anæsthetic could be administered without interruption, and he had had no trouble from blood running into the stomach or trachea. In one of the cases where he used Trendelenburg's tube the patient had a cough which lasted for some time, but he attributed it rather to pressure from the instrument than to entrance of blood into the lungs. He had, however, concluded that the most satisfactory method was to use the ordinary tracheal tube and stuff the fauces with a sponge.

DR. GERSTER had performed preliminary tracheotomy once, and in a case previous to exsection of half of the larynx. In that instance, he used Trendelenburg's instrument, and just after the operation had been commenced the India-rubber bag ruptured, and he was obliged to remove the canula and replace the bag by folds of gauze bound in position by silk. The canula was then reintroduced, and answered the purpose very well. With regard to one object mentioned by Dr. McBurney concerning tracheotomy as a preliminary operation, his own opinion was that preliminary tracheotomy performed a good while before the secondary operation afforded a good many advantages over its performance simultaneously with the operation for the removal of the disease. He recalled several instances where he had been present, and in which considerable time was consumed in performing the preliminary operation; thus in one instance half an hour was occupied, and it could readily be seen that in an anæmic patient the performance of the preliminary operation would necessitate the longer continuance of the anæsthetic and therefore an undesirable exposure to shock. Tracheotomy upon a grown subject was rather an indifferent operation if properly performed, and the necessary care was bestowed upon the after-treatment. The operation was not very serious, and the patient's respiratory tract became accustomed to the tube, and he, therefore, believed it to be advantageous to first dispose of this liability to accident before the operation proper was to be performed.

DR. W. T. BULL had had occasion to perform tracheotomy as a preliminary operation in four cases: three times for extirpation of a portion of the tongue, and once for removal of a recurrent growth from the side of the pharynx. In all instances he had used the ordinary tracheotomy tube. He had not seen any advantages following the use of the tube with the rubber bag. On the contrary he had thought that it interfered with expulsion of mucus from the trachea. He had not left the tube in more than forty-eight hours. He regarded the suggestion made by Dr. McBurney with reference to permanent tamponing the trachea after the operation as a very valuable one, and as an important addition in the after-treatment.

DR. BRIDDON remarked that he had been prejudiced against Trendelenburg's tube, and had simply used an ordinary tracheal tube, packing the fauces with sponges. The operations which he had performed, however, had always been laryngotomies. He thought it unnecessary to make the operation for the introduction of the instrument a tedious one. He believed there was no danger from hemorrhage, which always ceased after the introduction of the tube. He had been favorably impressed in the adoption of Nussbaum's method of narcosis in these cases, that is, to precede the anæsthetic by the use of a large hypodermic injection of morphine, perhaps fifteen drops of Magendie's solution. This is to be followed by the use of an anæsthetic, and he had employed chloroform, administering it to the production of moderate narcosis, and then performing tracheotomy. He had been surprised at the small quantity of chloroform required to maintain insensibility. In one operation not more than three and a half drachms were consumed, and the patient was able to assist at the operation, was sufficiently conscious to be able to empty the mouth of blood, etc., and yet he was placed beyond sensitiveness to the knife. He had not seen Trendelenburg's tube used without the occurrence of some disagreeable accident.

DR. WEIR had performed preliminary tracheotomy in one case with advantage; using only the ordinary tracheal tube, packing the fauces with sponges, and maintaining anæsthesia through the mouth of the tube. He was led to adopt this method because of having previously resorted to Rose's method in the removal of a naso-pharyngeal growth. It was found that the stretching of the neck unduly compressed the trachea and interfered with respiration. In the second case of a similar nature the use of tracheotomy permitted more satisfactorily the dependent position of the head. He was loath, however, to adopt preliminary tracheotomy, because he believed the operation in itself was associated with considerable risk. He had been led to this conclusion from studying the cases in which the operation had been performed for the relief of syphilitic disease of the larynx without much dyspnœa, and for rest of that organ. In two such cases pneumonia had occurred. He had also seen several instances of

cut throat where only the trachea had been incised and where the patient's condition was good, and subsequently chest symptoms developed. He would not resort to the preliminary tracheotomy unless the subsequent operation was evidently to be an excessively bloody one, and with risks not to be avoided by position, slight anæsthesia, etc.

DR. SANDS could recall only a single case in which he had used Trendelenburg's tube, and in that instance it worked very well. Pains were taken to prevent the expansion of the rubber bag over the lower orifice of the canula, and the only inconvenience observed was the occurrence of coughing, as already mentioned by Dr. Peters. He thought that if the instrument could be used with success so far as to completely occlude the trachea, it would form a very valuable invention. He had noticed, however, that it frequently failed to accomplish the purpose for which it was designed, as it allowed blood to pass down into the trachea. He had many times excised tumors of the pharynx and tonsils, or had removed the upper jaw without encountering the least danger from the entrance of blood into the air-passages. He thought that if these points received due attention during such operation, little or no danger need arise from this cause. In the first place, the patient should be placed in a chair with his head inclined slightly forward. In the second place, profound anæsthesia should be avoided, as the blood will enter the larynx only when it is rendered quite insensible, as is the case with deep narcosis. In the third place, it was desirable to operate quickly. In two cases of naso-pharyngeal polypus which he had removed years ago, no blood entered the trachea so far as he could discover, and the patient made a good recovery. The principle of tamponing the trachea was important, however, and he would be glad to see it realized in practice. His own experience had not led him to regard tracheotomy as an operation likely to cause pneumonia, yet he was not prepared to deny that such might sometimes be the case.

DR. GERSTER said that the weight of Dr. Sands' remark was largely in the proposition which he made not to carry the anæsthetic too far. He had had occasion to perform several operations upon the upper jaw, and he had always been careful not to place the patient too profoundly under the influence of the anæsthetic; only just sufficiently so that he would not resist violently enough to prevent the finishing of the operation. In all these cases he had not seen any difficulty whatever, because when any blood entered the trachea, the sensitiveness of that tube induced reflex movements which caused an immediate rejection of the blood.

DR. STIMSON remarked that he doubted whether the patient could always be depended upon to give evidence of the presence of blood in the trachea by cough. He had one patient whom he had anæsthetized six times for the removal of a constantly recurring growth in the upper maxilla. The woman took ether badly, and complete anæsthesia was never obtained for more than one or two minutes at a time. In that case he had seen the pharynx so full of blood that air bubbled up through it, and yet the patient never coughed. He was not positive that blood made its entrance into the trachea, but it was in the pharynx in large quantities, and air bubbled up through it. No bad consequences followed.

The PRESIDENT remarked that during the last fifteen or twenty years he had performed quite a large number of these operations, and he believed that by simply bearing in mind the suggestion made by Dr. Sands, no difficulty need be experienced with reference to a serious quantity of blood getting into the trachea. He believed that in a large proportion of cases the most bloody operations could be performed with safety without preliminary tracheotomy.

FRACTURE OF THE CALCANEUM.

DR. STIMSON presented a specimen which illustrated fracture of the posterior portion of the head of the calcaneum. He believed it to be probably the result of muscular action. The patient was a man fifty-three years of age, who was admitted to Bellevue Hospital in November last for a disease of the tibia which required amputation. Eight years ago, while crossing the street, he was knocked down by a wagon and received the injury which the specimen illustrated. At the time the injury was received, the patient said that the skin was not bruised. The fragment was the portion to which the tendo Achillis was attached, at least partially. It was more than an inch in length, and about three-fourths of an inch in breadth. On its outer side the periosteum was complete; on the inner side there was a growth of bone which presented the appearance of having been the result of reparatory process. The fragment had united with the bone at its upper border, but was about half an inch anterior to its original position. The specimen was accompanied by photographs, and a plaster cast which illustrated the deformity.

DR. BULL thought that pure muscular action could not produce this fracture; that it was the result of direct violence.

DR. STIMSON remarked that there were several cases upon record in which the fracture occurred as a result of muscular action.

DR. PETERS referred to a case, and DR. WEIR to three cases, in which fracture occurred as a result of muscular action.

MELANOTIC SARCOMA.

DR. GERSTER presented a specimen of melanotic lympho-sarcoma, which he removed from the neck of a man on the fourth of the present month. Three months ago the patient got heated from running about, and then sat down in front of an open window and was chilled. This was the only fact which he had been able to ascertain concerning the cause of the growth, although he did not attribute much importance to it as an etiological factor. Immediately after this occurred, the man noticed a slight swelling at the corresponding angle of the jaw, which gradually increased in size. There was no sore throat following the chilling, nor nasal catarrh. The tumor continued to grow and he consulted a physician, who proposed to inject into it tincture of iodine. At that time it was about the size of an Italian chestnut. Considerable reaction followed the injection. The tumor did not resume its former size and shape, but continued to grow rapidly, and after three months it attained the size of a small orange. It was situated in the upper cervical triangle below the angle of the jaw. Laterally it was quite freely movable, not so vertically, and the skin over it was attached to the tumor. Dr. Gerster diagnosed lympho-sarcoma of rapid growth, and gave a grave prognosis. Removal was advised; the exsection was not difficult. Immediately after cutting through the skin it was noticed that the mass had a peculiar dark color. On account of its appearance, and from the fact that through a slight puncture made by a hook introduced into its capsule for the purpose of lifting the tumor up, a black material exuded, he did not attempt to remove the tumor from the capsule, but dissected out the capsule and all, keeping well to the outside of the growth. At the lower and inner part of the tumor, where it approached the superior thyroid artery, there was a dense mass of connective tissue of recent inflammatory origin, which had attached the capsule to the bloodvessel, and also enclosed a small bundle of lymphatic vessels.

Immediately upon the oozing of the black muddy material, which presented the appearance of graphite, through the opening made by the hook, he removed the instrument and applied a ligature round the point, carefully cleansed the part, and then proceeded to the dissection without further assistance of this kind. At the upper and outer angle of the jaw, a large number of lymphatic glands were found which had exactly the characteristics of the tumor itself. They looked like a chain of small blue grapes, and burst as soon as touched. They were dissected away also with some connective tissue by which they were surrounded. When the tumor was cut open, it was found to contain a cavity in which there moved freely a black body that was surrounded by the dark fluid material already mentioned. Microscopical examination revealed that the growth consisted almost entirely of round-celled pigmented elements, with a very sparse stroma. The mass which was free in the centre, was doubtless the original swelling or lymphatic gland noticed first by the patient in the neck. The thick melanotic envelope enclosing this glandular body apparently represented the degenerated glandular capsule. The wound was closed by a few silver wire sutures, and healed by first intention. Early recurrence of the disease is to be expected.

FIBRO-MYOMA OF THE SCROTUM.

DR. W. T. BULL presented a specimen accompanied by the following history: H. C. F., forty-eight years of age and married, entered the hospital October 16, 1882. He gave no specific history, there was no history of cancer in the family, there was no history of traumatism. About twenty years ago, the patient first noticed a small, hard lump about the size of a marble in the lower part of the right side of the scrotum. There was neither pain nor tenderness on pressure, nor discomfort of any kind. This mass gradually increased in size until two or three years ago, since which time it had grown much more rapidly. On admission he complained only of the weight and inconvenience. The scrotum formed a tumor as large as a child's head, the enlargement being on the right side. The skin was normal with large veins, the tumor was ovoid in shape, and reached upwards as far as the external abdominal ring, which was dilated, and filled up when standing by a hernial protrusion as large as a goose egg, which could be easily returned. The surface of the tumor was smooth but uneven, and marked by several rounded projections which were semi-fluctuating. The right testicle was on its lower end softer than the left, and apparently somewhat flattened, but movable in the tunica vaginalis. The circumference of the tumor at its upper limit was fifteen inches, at its lower part eighteen inches, and was of firm elastic consistence, and not at all tender. There was no pain either from it or the hernia. The patient had worn no support. There were no enlarged glands. Removal was advised. The parts were washed with a solution of carbolic acid, 1 to 40, after which ether was administered. Dr. Bull was assisted at the operation by Drs. George A. Peters and R. F. Weir. The hernial protrusion was put back and held, the tunics covering the tumor were dissected down to the capsule, and the cord exposed. A strong piano string was placed round the cord two inches from the tumor, and held by the forceps; the cord was then cut across about one inch from the tumor and it appeared normal, but it was evident at once that the lower end of the hernial sac, which was adherent to the surface of the tumor over a space as large as half a dollar, had been cut across with it. The bloodvessels were ligated with catgut, the wound in the peritoneum was united by continuous catgut suture, the irregular portion of redundant scrotum was cut off with the scissors, a drainage-tube was introduced, and the wound was closed with sutures of carbolized silk, sixteen to twenty in number. Iodoform peat-bags and absorbent cotton were used in the dressing. The patient was discharged from the hospital cured, November 13th. The hernial protrusion was diminished in size, and was retained by a truss. The tumor weighed three and a half pounds. It had been examined by Dr. Satterthwaite, who reported that it was a composite growth, consisting chiefly of ordinary fibrous tissue, to a less extent of fatty tissue, and to a still less degree of non-striated muscular tissue. It was situated behind the cord, which was lengthened, but otherwise unaffected, and above the right testicle, which was normal, as was also its tunica vaginalis. The origin of the growth was apparently from subcutaneous connective tissue, its outer layers forming a sac that was infiltrated with lime salts over most of the surface, while where depositions were absent there were small hernial protrusions of tumor substance.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON PRACTICE.

Stated Meeting, January 16, 1883.

DR. EDWARD G. JANEWAY, CHAIRMAN.

DR. JANEWAY said that he had made a post-mortem examination on a man to-day, who had died of

ABSCESS OF THE LIVER,

in which a quart and a half of pus was evacuated, death being due to peritonitis consequent on rupture of the walls of the abscess. Previous to his death, Dr. Janeway asked the patient if he had had any hypochondriacal or melancholiacal attacks. The patient gave an emphatic negative answer. This was only one of a number of cases of abscess of the liver in which no melancholia or hypochondriasis was present. He therefore believed that these conditions existing in connection with abscess of the liver were the exception rather than the rule.

The paper of the evening was read by DR. HENRY D. NOYES, and was entitled

EYE TROUBLES WHICH MAY BE ERRONEOUSLY ATTRIBUTED TO LESIONS OF THE BRAIN AND NERVOUS SYSTEM,

The author said that the connection which exists between diseases of the eye and other parts of the body, especially with the nervous system, had come to be very thoroughly appreciated. Since it had been demonstrated that the ophthalmoscope could give evidence in regard to more distant parts of the body than the eye itself, it had been employed largely by neurologists and by general physicians. What he had to say was not in disparagement of this use. On the contrary, he thought it ought to be used more extensively than it had been in the past. His remarks were more in the shape of a caveat against erroneous deductions.

Among the objective facts which are observed in the eye with the ophthalmoscope were certain ones which were capable of misinterpretation. We look at the retina with reference to its clearness, and the condition of its bloodvessels. As to the optic nerve, it was asserted that its appearance varied greatly within normal limits, both as to its color and definition and texture. It was very infrequent that optic hyperæmia existed in acute brain troubles; it was, however, frequently present in acute troubles at the base of the brain; but in acute meningitis, or acute inflammation of the cerebral tissue, it was very rare to find evidence of its existence in the optic nerve. Changes in the optic nerve,

when due to brain trouble, were, as a rule, the effect of chronic inflammations, or of new growths, or of interstitial changes which required a long time before they made themselves known. If, therefore, there was redness of the optic nerve, it was necessary that other symptoms should be present before this could be taken as evidence of brain disease. Intense hyperæmia of the optic nerve was shown more commonly as the result of strain, or some defect in the eye itself, than as the result of disease of remote tissues.

One change found in the optic nerve which was significant of brain disease was that of swelling. This condition of choked disks might, however, be present where there was no other evidence of active brain trouble, or the probability of latent brain trouble. In such cases the condition of the nerve should be looked upon as an anomalous one, which was occasionally observed.

The appearance of the retina varies, to a considerable degree, in different individuals. It is frequently seen to present a glistening, opaque look, especially along the line of the bloodvessels. This should not be mistaken for perivasculitis. It does not indicate that there is a condition of inflammation.

Moreover, the general illumination of the fundus varies greatly with the size of the pupil and the complexion of the patient. This could be seen by an examination of any of the figures in books illustrating the normal variations. Sometimes there is seen a bright, opaque striated surface, running out from the nerve itself, which might be mistaken for an exudation. The speaker remembered a case where he committed this error, and supposed it to be indicative of inflammation with exudation, whereas it is by no means infrequent, and denotes an imperfect development of nerve fibres; that is to say, it is a congenital condition, which has no influence upon the real function of the eye, or any bearing upon other conditions of health.

Sometimes the optic nerve is very pallid and the retinal vessels small, and there may be a shallow excavation. This condition might be supposed to be indicative of atrophy, whereas it may be only due to the general poverty of the circulation. There were many singular anomalies familiar to ophthalmoscopic investigators which might be alluded to, but, under the circumstances, they were, he thought, apart from the subject of the paper. Dr. Noyes said, however, that he desired to call attention to the fact that an experienced observer may mistake the appearance in the eye for evidence of inflammation, as had occurred in a case under his observation, in which an English ophthalmologist had supposed intracranial mischief of some sort to exist. Dr. Noyes found, after fitting the patient with appropriate glasses, to correct a marked hyperopic astigmatism, that his vision became $\frac{20}{20}$. The other eye was removed, because of a tumor within it, and the mental symptoms disappeared entirely. This was a case where the mental symptoms were undoubtedly due to the refractive error which had not been observed by the physician who had previously examined the patient.

These were some of the objective errors. Putting that subject aside, there were a series of symptoms of subjective character, which were very likely to be mistaken for troubles of the nervous system. These were principally cases of refractive error, such as hypermetropia, astigmatism, and troubles with the extrinsic muscles of either eye. This was not a new subject. Its full discussion was perhaps due more to Dr. Weir Mitchell, of Philadelphia, than to any other gentleman; but the experience which the author of the paper had with these cases, he thought, entitled him to make reference to them. Errors in refraction, as far as the symptoms are concerned, are the same as simple spasm of the accommodation without error of refraction; but the class of cases which Dr. Noyes now signalized were those where patients made very little complaint in regard to the eyes, and in some cases where there was no complaint whatever. The patient has thus impressed the physician with the idea that some other portion of the body was affected. The chief symptom which manifests itself in these cases is that of headache. The headache can be of any possible variety, and of any possible degree. It can be frontal or temporal; it can be confined to the vertex, the occiput, or even to one side of the head, although this latter variety is comparatively rare. This headache may or may not be associated with the use of the eyes. The patient may arise in the morning with a headache, or it may come on after an increase of any mental labor. Connected with the headache will be another symptom, which may be regarded as more significant—namely, nausea. It is not uncommon for nausea and headache to be associated together, nausea being present at intervals, while the headache is exceedingly persistent.

Take a case in which the patient makes no complaint of any trouble with the eyes, but speaks of severe headache, and suppose that you have occasion to examine his eyes to see if any information can be obtained in them to explain the symptom, and suppose that you find in one eye a deep degree of congestion, and in the other eye redness and opacity of the nerve, this condition might lead to the belief that these are cases of chronic meningial trouble. We might suppose that this opinion was reinforced by appearances of exudation and a fringy condition of the edge of the nerve. The same symptoms can exist without there being any refractive error.

To illustrate this point, Dr. Noyes read a letter from a physician, who had sent to him a young lady supposed to be suffering from slight spasm of the internal recti muscles, which contributed towards certain external symptoms. She complained of certain vague symptoms. She experienced a sensation of distress in sitting among persons, and disliked to look into the eyes of other people. She had loss of sleep, inability to sit, and likewise experienced a sense of mental fatigue, all of which symptoms indicated a considerable degree of disturbance of the psychic system, which was presumed to lie beyond the influence of the eyes. Hysterical convulsions had occurred, and four years previous the patient had a transient goitre. Later she fell, striking upon the end of her spine, at which point there was much tenderness upon pressure. There was no trace of uterine or ovarian disease.

Upon critical examination of this patient it was found that a large part of the cerebral disturbance was due to intense spasm of the muscles of accommodation. Under the free and vigorous use of atropia the spasm was much relaxed, but up to the present date had not been wholly overcome. The origin of this spasm was remote, and doubtless could be explained by the injury to the spine which the patient had received.

Dr. Noyes remarked in passing that he had seen not a few cases where serious ocular trouble depended upon concussion of the spine; the latter giving rise to a morbid condition of the extrinsic muscles of the eye. He said that he would take the liberty of reading a second letter in which the particular trouble was due very largely to a disordered condition of the muscular apparatus of the eye. A young woman, 32 years old, was near-sighted, and had divergent strabismus. She subsequently developed other symptoms and the question was, whether these were not due to her strabismus, the latter being supposed to be of congenital origin. She was seen some years ago by an ophthalmic surgeon, who advised no interference. During her teens

she suffered from violent headaches. Three years ago she had an attack of melancholic insanity of a few weeks' duration, together with other symptoms. The last attack resulted from a fall upon her head. The physician made the diagnosis of primary curable dementia. The patient had chloro-anæmia, with a very marked bruit in the carotid and at the base of the heart, and there was probably also present lithæmia. The symptoms indicated the condition of impaired nutrition rather than congestion, insomnia and disturbance of vision. She now complains of buzzing noise in her ears, and has always complained of hallucinations. What is especially important is that she cannot use her eyes without pain. This, the attending physician thought, might be attributed to the strabismus.

Dr. Noyes said that the case was, in his own judgment, one in which the symptoms were to be attributed to the condition of the eye. He therefore determined upon an operation for the divergent strabismus, which resulted satisfactorily, not only in relieving the local pain, but her health, also, improved materially afterwards.

This subject of irritation as the cause of disturbance of the ocular muscles, is one that has been debated considerably, and is one about which there is not a perfect consensus. There is no difference of opinion about the disturbance of the ocular muscles. While, on the one hand, there are assertions which are not in accord with experience, Dr. Noyes was of the opinion that these muscular disturbances exert a far greater influence, not only over the functions of the eye, but also over the functions of the health in general. As an illustration of this, he took pains a few mornings since to study the symptoms of a little girl, fourteen years of age, who had been brought to him by her mother. The mother stated that the child had suffered from headache for three years, and that she had made up her mind to consult a specialist. The question was, whether to go to an oculist or a neurologist. A headache had existed for three years, and had become worse of late. When she looked hard at people they seemed to go away from her. She has a headache several days in a week, and very often wakes with it in the morning. In spite of the headache she often continues to read, as she says, for the purpose of forgetting it. The pain is principally in the occiput. A jar upon the feet, or a slight blow upon the head, is very unpleasant. In her personal appearance she is healthy. She has a slight tenderness over the supraorbital region, upon the right side. She sometimes passes her hand over her eyes, to clear away the mist. On testing this patient with prisms, he found no important muscular error, but when the child was asked to look at a finger held close up to the face, it was noticed that it was difficult for her to keep both eyes upon it; and when it was held very close, one eye would deviate to one side. The diagnosis was extreme debility of the internal recti muscles, which has given rise to the condition of headache.

The symptoms which persons who suffer from this disease have, are headache and nausea, and an inability to look continuously at an object, and pain easily aggravated by the use of the eyes. They cannot ride in the cars, or look out of the cars because it excites headache. This was a brief statement of this class of cases.

Now, how are these cases to be recognized and errors to be avoided? In the first place, errors may be committed in using the ophthalmoscope, owing to insufficient experience with it, the observer not being familiar with what is normal and what is abnormal. But it is more important, perhaps, that the instrument shall not be employed according to one method only, that is to say, by the indirect method, when the mirror is held in one hand and a lens in the other. A much more valuable mode is the direct method, which consists in the use of an instrument supplied with glasses to correct this vision of the patient as well as that of the observer, and showing whether you are dealing with a normal or an abnormal eye in regard to its refraction. With such an instrument you can get a much better idea of the appearance of the eye.

Finally, under suitable circumstances, the resort to atropia is advisable. Now, if one uses atropia in an examination of eyes for suspected brain trouble, precaution is necessary. With the ordinary size of the pupil it is necessary for the observer to have considerable expertness in order to get a correct idea of the condition of the eye. If you are to examine a patient who is liable to become blind from brain disease, and you wish to use atropine, it is proper to assure your patient that no ultimate trouble can result from its use, otherwise disagreeable feelings might be entertained on the part of the patient towards the physician. On the other hand, when the symptoms are of a subjective kind and are due to refractive and muscular errors, atropine may not only help the examination, but may remove the headache. This removal of the headache may be only temporary, permanent relief coming only after suitable optical corrections by means of glasses. The difficult refraction cases are those in which there is a considerable degree of astigmatism. In a considerable proportion of cases astigmatism complicates the refractive error.. The degree to which subjective symptoms make their appearance varies greatly according to the temperament of the patient and his general condition. This is especially shown in those instances when the trouble is due to uterine disease. In muscular errors the treatment consists in fitting the patient with suitable prismatic glasses, and sometimes in the use of tenotomy, and in the treatment of remote discoverable lesions which will have an influence upon this trouble. Both refractive and muscular errors may be combined together, and sometimes in such a manner as to make the prescription of glasses exceedingly complicated.

DR. MARY PUTNAM JACOBI remarked that the subject of the paper was one that interested her extremely from a neurological, rather than an ophthalmological, point of view, although she believed it was eminently proper for one interested on the nervous side of these cases to examine into the other side, for it was a neurologist (Dr. Weir Mitchell), and not an occulist, who first called attention to this condition. It was probable that it was intimately associated with the anatomy of the part. In the cases referred to with functional disturbances of the eye, spasm of the internal recti muscles was usually found. She did not know whether or not it was the generally accepted view that this spasm of the internal recti was dependent on the close association of the optic nerve with the corpora quadrigemina. She alluded to the fact that spasm of these muscles had been induced by falling on the end of the spine. Similarly, concussion of the corpora quadrigemina and the cerebellum would serve to explain the curious symptoms of nausea and vertigo which have often been observed in these cases. She supposed that this condition might give rise to a considerable amount of psychical disturbance. Such disturbances may depend upon the constant strain produced by the blurring of the objects the individual was regarding. She thought it was very extraordinary that in insanity, associated with visual hallucinations, we did not more often find disturbances of the eyes. When she and Dr. Seguin were visiting the Hudson River State Hospital for the Insane, the latter examined all of the male patients having visual hallu-

cinations, and found remarkably few refractive errors. She alluded to a case that recently came under her observation. The patient suffered from visual hallucinations, without any other symptoms. This condition had lasted for several years, and was due to no discoverable cause, unless to reflex uterine irritation. In that case the eyes were examined, and not the slightest trouble was found.

DR. BEARD wished to ask Dr. Noyes whether he had watched cases of the character he had described in his paper, for a number of years after treatment had been discontinued, in order to ascertain whether the relief afforded was permanent, not only with respect to the ocular trouble, but also to the general condition. A second point of much interest to him was, how to tell whether this condition of the eye was the result or the cause of the disease. He had found it impossible in any case to answer the question completely. This whole subject, it seemed to him, was to be referred to a general condition. The entire body is a bundle of reflex actions. The same statements that apply to the eyes, are applicable to the stomach, the urethra, the rectum, etc., but he had never seen a case in which permanent relief had been obtained by the use of glasses alone. The result of his observations and experience is that the relief of the local irritation was only a help, and did not serve to effect a cure independent of other treatment.

DR. PUTZEL thought that an important point had been overlooked. Stress had been laid on reflex action in these cases. He thought that there was a continual outflow of force which must cause a constant strain on the nerves, which strain would induce a condition of neurasthenia. In regard to the mode in which reflex irritation acts, that it is confined to the corpora quadrigemina, he was unwilling to admit. It seemed to him probable that it acted more generally than upon one local centre of that sort.

DR. BIRDSALL had used the method recommended by Dr. Noyes, and with a partially successful result. The patient was a boy about twelve years old, suffering from an intense headache. This was aggravated by reading, and particularly by pursuing his studies in school. The patient, when seen, was in somewhat of a maniacal condition, in which there were hallucinations, and which at times seemed to take very nearly the form of an epileptic or hysterical seizure. The mother thought the boy unconscious at times, as he would lie in a stupid state. Usually the headache was followed by a period of excitement, after which he would lie down, sleep for several hours, and wake up relieved. Glasses were ordered. The relief they afforded was very decided, for a time the patient being relieved from headaches. After a few weeks they returned at greater intervals, and he was ordered to leave school. Subsequently, on resuming his studies, the headaches again came on, but the maniacal attacks did not return for a time. In the course of a year, however, they made their reappearance, though they were less violent. After a time the patient was taken out of school altogether and sent to the country. In the course of a few months he recovered his health entirely, and was now apparently a perfectly well boy. Dr. Birdsall was inclined to believe that the trouble, in this instance, was not due to any disease of the eye, but was caused rather by the condition of his general nervous system. He had, moreover, seen similar cases in which similar attacks had been relieved by correction of errors of refraction. He thought the condition referred to ought not to exist if the nervous system was in a healthy state.

DR. JANEWAY suggested that the class of cases alluded to by Dr. Beard was not the same as that alluded to by the author of the paper, and that they were undoubtedly due to error in the development of nervous tissues.

DR. WEBSTER testified to having seen many cases permanently relieved by the correction of error of refraction. Dr. Birdsall's case called to mind the difficulties that were sometimes met in treating these cases. In prescribing glasses it was proper first to order those that would correct *only the manifest* hypermetropia. Such would afford relief for a time, and in some cases proved to be all that were necessary. If symptoms begin to return the eye should be tested again, and another pair of glasses prescribed, which would, in all probability, be found to give permanent relief. If not, by renewing the glassses every six months all the hypermetropia would be finally corrected.

In closing the discussion DR. NOYES testified in most positive terms to having seen many cases permanently relieved by simply prescribing appropriate glasses.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, January 11, 1883.

THE PRESIDENT, JAMES TYSON, M.D., IN THE CHAIR.

DR. E. T. BRUEN presented a

SMALL TUMOR OF THE HEAD OF THE PANCREAS,

about two and a half inches in diameter and closely adherent to the common bile-duct. The growth is of a colloid nature, but its histological character is unsettled by microscopic examination. There were no secondary deposits in any other viscera, as is the rule in colloid growths. The patient was a male, æt. about 65 years, who, for two years prior to death, had intermittent attacks of jaundice, attributed to catarrh of the biliary duct. The case was under observation for two months. At first the symptoms of chills and fever led to treatment for malaria, but as the jaundice gradually deepened, treatment for the supposed catarrhal state of the bile-duct was instituted. The futility of a well-directed and usually successful treatment was the special indication of some more substantial cause. Hepatic trouble or biliary calculi were readily excluded, but there was nothing to fasten suspicion on the pancreas. There was constipation with clay-colored stools. There was febrile movement of hectic type—the so-called hepatic fever, accompanied by irregular chills. Intestinal indigestion was not marked. Indeed, without exception, the negative results of the clinical record are of the most discouraging character. The case is presented because each case of pancreatic disease ought to be recorded, so that many cases viewed collectively may contribute to the clearness of a future distinct picture of pancreatic disease.

DR. FORMAD said that he had notes of the autopsies of five or six cases of cancer of the pancreas, with marked jaundice. It seemed to him that the jaundice was most persistent in primary pancreatic carcinoma from pressure on the bile-duct. He did not think that the tumor just presented was carcinomatous, as there would then probably have been secondary growths in the liver. The growth was probably a cystic colloid.

DR. BRUEN called attention to some forty cases of jaundice due to primary carcinoma of the head of the pancreas, lately reported by another observer, from which it was demonstrable that jaundice was an invariable symptom of primary hard carcinoma of the head of the pancreas, while it was uncommon when the disease was secondary or affected other parts of the organ.

DR. JAMES TYSON then presented a specimen of

DIAPHRAGMATIC HERNIA,

from a German about 27 years of age, who had been ailing since February, 1878, when, stretching himself,

his wife suddenly pretended to tickle him. He quickly threw down his arms, and at that moment felt a sensation of pain on the left side in the neighborhood of the heart. At the same time he felt faint and cold. In five or ten minutes these sensations passed away, but he remained very much frightened. When first seen by Dr. Tyson, in June, 1880, he could not even walk across the floor without becoming completely out of breath, but he said he was not short of breath when the accident first occurred. He had also a peculiar puffing expiration which did not occur, however, with every act of expiration, but once in four or five. There was no cough. Physical examination revealed, on inspection, almost total absence of movement of the chest-wall in the upper half, the respiration being almost purely abdominal. The upper percussion border of the heart corresponded with the junction of the third rib with the sternum, and the right border with the middle of the sternum. The apex beat was in its normal position, but was more diffuse than in a strictly normal state. Pulmonary percussion appeared normal, except below the left scapula, where resonance was less than in the corresponding situation on the right side. Vocal fremitus was impaired over the whole of the left lung. There were no abnormal cardiac murmurs. He was treated at various times with digitalis, bromide of potassium, chloral, tonics, etc., and even a blister was put over his heart, with the view that there was some cardiac, or pericardial affection, although the physical signs were wanting. There was no improvement, although at times the dyspnœa, which was the most distressing symptom, seemed sometimes less. His death occurred December 15, 1882, from obstruction of the bowels. At the autopsy it was ascertained that about 20 inches of the large intestine, with its corresponding mesentery and almost the whole omentum, had ascended through the œsophageal opening of the diaphragm into the left pleural sac, encroaching upon the space occupied by the left lung until the latter was compressed into the apex of the left pleural sac and was reduced to a cylindroid mass, about 15 centimetres in length and half as many in diameter. There was no hernial sac, the opening being that for the œsophagus. The case was, therefore, technically one of hernia diaphragmatica spuria. The heart was displaced to the right, but was otherwise normal; the liver was slightly fatty, but the other viscera were normal. It is not unlikely at the moment referred to in the history, when the patient threw down his arms, that a small portion of the omentum or mesentery slipped through the œsophageal opening, and that subsequently and more or less gradually the vacuum tendency of the pleural sac in each act of respiration caused the remainder of the mass to be drawn in until the entire cavity was occupied. This accounts for the fact that there was no dyspnœa at the beginning, but that it gradually increased as the thoracic space was intruded upon. In vol. 81, 1882, of *Virchow's Archiv*, will be found an exhaustive article on Diaphragmatic Hernia, in which 291 cases are collated. In a somewhat hasty examination of this paper, Dr. Tyson has been unable to discover a single case so long under observation as this—nearly four years. Many cases were discovered at the autopsy and had been unsuspected, others were congenital, and others were traumatic.

DR. BRUEN asked if there had been any hiccough? If so, was there any dysphagia with solid food? Finally, did the physical signs suggest pneumothorax?

DR. ROBERTS made some remarks with reference to the diagnosis and to the possibility of laparotomy in similar cases. He also asked whether the symptoms just preceding death were those of strangulation.

DR. DAVIS referred to thirst as a prominent symptom according to Lawrence.

DR. TYSON replied that Dr. Formad had told him that there was decided hiccough. There was no true tympany, with the absence of the vocal fremitus. Nothing gave rise to any suspicion of its true nature. Thirst was marked. There was no dysphagia.

DR. J. H. MUSSER then presented the specimens from a case of

ULCER OF THE STOMACH IN THE ANTERIOR WALL; ADHESIONS TO THE ABDOMINAL WALL; HEMORRHAGES AND PAIN; DEATH FROM MORPHIA HABIT.

J. J., aged 71 years, millwright. Fourteen years before his death he was attended for hæmatemesis occurring after three days of nausea. Over a pint of blood was vomited, and considerable was discharged by stool the next day. In ten days he returned to work and enjoyed good health for two years, with the exception of occasional attacks of indigestion. Then a recurrence of nausea, followed by a profuse discharge of blood per anum, occurred. He made a full recovery, but pain after eating was now noticed. Two years subsequently he bled very much from a wound of the foot; was much prostrated thereby. This was succeeded by severe pain after eating, with marked epigastric tenderness. The constant use of narcotics alone gave him relief. November, 1873, he was again under treatment for gastric ulcer without any avail, save when he exhibited narcotics. He resorted to the use of morphia, and continued its use during the remainder of his life. Change of diet did not influence the pain, and he partook of a laborer's fare. In 1877 a small tumor to the left of and several inches above the umbilicus, hard, tender, and apparently involving the abdominal wall was discovered. For several years he worked in a country sawmill, using one drachm of morphia a month. Heavy lifting aggravated his pain. In August, 1882, the patient took to his bed. Death took place. The only anatomical alteration noted at the autopsy was the change in the stomach. The organ was enlarged and contracted (hour-glass) towards its fundus. The anterior wall, one-third of the distance from the fundus, and at the point of constriction, was adherent to the abdominal parietes to the left of the median line, three inches above the umbilicus. Opposite to the point of adhesion in the mucous membrane there was a small ulcer two lines deep and six in diameter, with clean-cut edges, a healthy floor, and surrounded by cicatricial tissue for a radius of one inch. Undoubtedly the ulcer would have healed entirely had not the morphia habit cut off the patient. Dr. J. H. Musser thought that it was plausible to suppose that the first hemorrhage, taken with the profuse foot hemorrhage, was due to the patient having been of an hemorrhagic diathesis, and that the second gastric hemorrhage was from the same cause, and was attended by a hemorrhagic infarct, with subsequent development of the ulcer. Especially is this possible, as it was only after the second hemorrhage that pain occurred, and this symptom is never absent, "except in cases which run a rapid course" (Da Costa).

NEWS ITEMS.

NEW YORK.

(*From our Special Correspondent.*)

DRS. WILLARD PARKER and FRANK H. HAMILTON are doing well. The former has suffered for some months from a disease of the urinary organs connected with advanced life, and his condition has been a troublesome one.

A RECEPTION TO MR. F. SEYMOUR HADEN, OF LONDON, AND TO MEMBERS OF THE NEW YORK ACADEMY OF MEDICINE is to be tendered by the Presi-

dent and Vice-presidents of that Society, upon the evening of February the 10th, and the invitation has been extended to all to "Join in the Loving-cup," that relic of the round-table which suggests free-boasting and convent-robbing and revelry, which are quite inconsistent with the dignity of the gray-haired solons of the medical profession of this city, whose deeds of daring are ordinarily committed with the blunt-hook, or the scarifier.

It is to be regretted, by the bye, that this body will not accept the munificent offer of the Army Medical Museum Library, and exchange some of their duplicate pamphlets and books for an equal number of rare foreign pamphlets.

THE NEW YORK COUNTY SOCIETY'S DELEGATES.—It is strongly hinted that if the medical delegates from the County Society are not supported by the delegates from the other county societies in the matter of the new Code, that next year they will refuse to go to Albany.

BALTIMORE.

(From our Special Correspondent.)

THE PREVALENCE OF SMALLPOX.—So much has recently appeared in the public prints concerning the prevalence of smallpox in this city, that a brief statement of the true history and actual extent of the disease in our midst may not be unacceptable to the readers of THE NEWS. At the outset, it may be well to state that the reports have been very grossly exaggerated, and that in no sense can the disease be considered to be epidemic. Indeed, in no single week has the mortality equalled one-half of the highest weekly death-rate from smallpox recorded in 1872–73, when we last had the scourge, and when we escaped the unenviable notoriety that we have lately acquired with less justice. Smallpox has prevailed in Baltimore at pretty regular intervals of ten years for a period dating from early in the century. The cause of this is probably to be found in the general neglect of vaccination during periods of freedom from the disease, whereby the number of susceptible individuals gradually increases, until a large proportion of the community becomes ready to be infected by the varioloid poison. From the disappearance of smallpox in the spring of 1873, in consequence of the thorough system of vaccination adopted by the Health Department, smallpox found no lodgement in the city until the closing week of 1879, and then for only a brief period. On December 27th a man was discovered at the ticket office of the Baltimore and Ohio Railroad with an eruption that proved to be that of smallpox. He was forthwith sent to the quarantine hospital.

On January 11, 1880, a man who conducted his business in the vicinity of the station, and whom the original patient (Cordes) had engaged in conversation before his detection, sickened with smallpox, was sent to the hospital, where he subsequently died. On January 13th, four children of the proprietor of a saloon in which Cordes had called upon his way to the station, developed smallpox, and on the 15th the wife of the proprietor sickened with the same disease. They were also sent to the hospital. On January 26th, a man who had worked at the saloon at the outbreak, but who had moved to another house, was attacked with smallpox and was removed to the hospital. No further development of the disease was observed in the city. On Christmas day, Cordes, the original patient, who was apparently a tramp, had called at a tavern on the Frederick Road, near the city, and shortly afterwards four persons in the house developed smallpox. These facts were reported in the *Bulletin of the National Board of Health* by Mr. A. R. Carter, the indefatigable Secretary of our own Health Board. They are interesting as showing periods of incubation in the several cases. The active measures adopted probably checked the further progress of the disease. In June, 1881, one case was reported at Locust Point, the southeastern water front, but no new cases seem to have resulted from it. The present visitation dates from November 4, 1881, when a colored child, lately arrived from Allegheny City, developed smallpox. It resided in Franklin Street, in the northwestern section of the city. Some relatives of this child carried the disease to Pine Street, in a more central location, and other inmates of the house on Franklin Street were attacked. The disease spread slowly; scattered cases reaching South Baltimore, where there is a densely crowded colored population, in January and February, 1882. The eastern section of the city was not invaded until July, when near the water front of the eastern portion, a crowded and ignorant population, composed largely of Poles and Bohemians, was attacked. The gradual advance of the disease can be realized by an examination of the mortuary reports for the months of which we have been speaking, and for the succeeding ones until the present.

DEATHS FROM SMALLPOX.—1881, Nov., 5; Dec., 5. 1882, Jan., 2; Feb., 6; March, 10; April, 12; May, 17; June, 13; July, 22; Aug., 24; Sept., 71; Oct., 63; Nov., 94; Dec., 217.

Already in August, 1882, the Commissioner of Health, Dr. Benson, appointed additional vaccine physicians, so that by Jan. 1, 1883, his force of about thirty-five physicians were busily engaged in their work. The sudden increase of mortality during the month of December, however, warned the city authorities that in order to promptly arrest the progress of the disease more active and thorough measures were necessary. The Commissioner of Health, therefore, acting under the advice of the Mayor, increased the vaccine force to over one hundred, and the work of systematically inspecting and vaccinating the whole population was forthwith begun. Already the beneficial effect of this wholesale vaccination is apparent in the diminishing number of new cases and of deaths. Of course, but little perceptible influence could be expected during the first three weeks of the month, but as the result of vaccination begins to become apparent, the outlook becomes most encouraging. Since January 1, 1883, the vaccine physicians have reported 102,800 vaccinations; these, with the public school vaccinations, and the work of the regular vaccine physicians during 1882, will amount to more than 200,000 recent vaccinations by public officers. Probably 100,000 persons have been vaccinated by private practitioners. Within a few weeks the vaccine physicians will have completed their systematic visitations, and we may confidently hope to have the smallpox entirely under control before the first of March. The returns for the weeks of the present month will exhibit the progress of the disease during the earlier portion, and the influence of vaccination, as shown in the last week's returns.

Mortality for smallpox for the week ending January 6, 79; January 13, 83; January 20, 92; January 27, 75. There were reported for the week ending January 12 (new cases), 264; January 20 (new cases), 296; January 27 (new cases), 256. There remain (January 27) 469 cases of smallpox in the city, in 398 premises, as shown by the records of the Commissioner of Health.

It will thus be seen that, even at the worst, our condition has been greatly exaggerated by report, and that we have suffered less from smallpox than other cities, about which no excitement has been raised. It is too early yet to expect the full effects of general vaccination to be manifested, but there can be no doubt that we are rapidly becoming a well-vaccinated community,

and that a few weeks will witness the complete disappearance of the scourge from our midst. Indeed, we already see the beginning of the end. Devices to escape detection are numerous and ingenious. Not many cases, however, remain concealed, since the returns of physicians, the inquiries of the public, the jealous watchfulness of neighbors, investigations of sanitary inspectors, and the fear of the law bring most cases to the knowledge of the authorities.

WASHINGTON.

(*From our Special Correspondent.*)

NATIONAL BOARD OF HEALTH IN CONGRESS.—On January 26th, Mr. Harris, from the committee to investigate and report the best means of preventing the introduction and spread of epidemic diseases, reported the bill (S. 2259) with the recommendation that it pass. The bill consists of three sections, the first repealing Section 10 of the Act of June 2, 1879, which limited the operations and duration of that Act to the term of four years, as also that clause of the Appropriation Act of August 7, 1882, which confined the operations of the Board to cholera, yellow fever, and smallpox; the second rendering available for the work of the Board the unexpended balances of the appropriations heretofore made on its behalf, which lie to its credit on the books of the Treasury, amounting to about $124,000; and the third, authorizing the Board to use, of its unexpended conditional appropriations, the sum of $100,000, or so much thereof as may be necessary in the event of an epidemic during the fiscal year ending June 30, 1884.

Mr. Harris accompanied the bill with a report, which was ordered to be printed. The report discusses the action of the Board during the yellow fever epidemic of 1879, showing that the disease was actually stamped out in New Orleans, and confined to the limits of Memphis, and that "instead of the general demoralization and panic, with suspension of business, trade, and commerce, which pervaded the country in 1878, commerce and communication with the infected cities were REGULATED, NOT STOPPED, or even retarded to any considerable extent, and the general business of the country went on in its usual methods, and through its usual channels, without serious interruption. . . . In the opinion of the committee, the Board has accomplished much, and is capable of accomplishing highly important results of great benefit to the country; results which can be accomplished by no other agency."

The report adverts to the power of Congress to regulate commerce in respect to the importation of contagion as well as in respect to the importation of other things, such as of adulterated or impure drugs or medicines; but the committee does not deem it necessary to attempt to draw the line, or define sharply, exactly where the power of Congress to regulate commerce ends, and the legitimate exercise of the police powers of a State begins, as the act which the bill reported proposes to perpetuate does not conflict, or in any way interfere, with any State or municipal board of health, or its rules and regulations.

The report concludes as follows:

"If it be admitted, as it is believed all must admit, that the action and operations of the Board even tend to the preservation of life and health to any, however small the extent, such fact makes it eminently worthy of our support, and, in the opinion of the committee, it should be sustained with such powers and means as will enable it to perform its functions fully, promptly, and efficiently.

"When the memories of the fearful ravages of the epidemic of 1878 were fresh, both houses of Congress were ready to appropriate, and did appropriate, all that the committee asked for the purpose of endeavoring to find, if possible, a means of preventing the recurrence of this terrible scourge; but as the memories of the hundred thousand sufferers and the twenty thousand new-made graves of that period are fading from our minds, the committee has experienced more or less of difficulty in obtaining the appropriations necessary to enable the Board to perform the important duties which devolve upon it, and, indeed, found it impossible, at the last session, to obtain adequate appropriations.

"The practical question, as it appears to the committee, is, the country being now free from yellow fever and cholera, shall we use the necessary means to keep it so, or relax into indifference, withhold the powers and the necessary means to prevent their importation, and await the outbreak of another epidemic, which will cost the country hundreds of millions of dollars and thousands of the lives of our people, to awaken us to the importance of preventive measures, in which the committee believes we can find absolute security?"

NEW ORLEANS.

(*From our Special Correspondent.*)

POISONING BY CHLORAL.—A few days ago the daily papers reported a death from poisoning by chloral hydrate. In this case it is probable that the overdose was accidentally taken, as it was alleged that the victim was in the habit of using it to produce sleep. I do not know that there is any information in regard to the amount actually ingested.

Some days before this event, a case of poisoning by the same agent was admitted to a ward in Charity Hospital. The circumstances were as follows: A young gentleman took, with suicidal intention, a single dose of one hundred and sixty grains. When brought to the hospital, probably two to four hours after ingesting the drug, he exhibited the usual symptoms of contracted pupils, cool surface, and feeble pulse. He was treated with stimulants and warmth, and was promptly and completely relieved. Mr. Michinard, the intelligent ward student who conducted the treatment, administered coffee and carbonate of ammonium, but did not resort to strychnia.

Some time since a patient of a well-known practitioner here took ʒij of chloral hydrate at one dose, with no other effects than an uninterrupted sleep from 8 P. M. until 7 A. M.

Only one well-authenticated case of death from chloral hydrate has occurred in Charity Hospital. In this case the physician prescribed small doses to be repeated at stated intervals. By some means the patient got the bottle in his possession and repeated the doses so frequently that death occurred before attention was attracted to any unusual symptoms.

NEW YORK STATE MEDICAL SOCIETY.—The annual meeting of this Society will be held at Albany on Tuesday, February 6th, and it promises to be very largely attended, great interest centring in the Society's action in reference to the new Code which was adopted last year without previous notification to the members.

THE ARMY APPROPRIATION BILL, as reported to the Senate, abolishes the office of Assistant Surgeon-General, and appropriates $15,000 for the purchase of books for the Army Medical Museum.

THE NEW YORK COUNTY MEDICAL SOCIETY held a special meeting, which was very largely attended, last Monday evening. The meeting was called to obtain an expression of opinion from the Society in

reference to the new Code. DR. D. B. ST. JOHN ROOSA offered the following resolution:

Resolved, That the Medical Society of the County of New York approves of the amendment to the By-laws of the Medical Society of the State of New York, adopted at the annual meeting in February, 1882, and that we indorse the system of Medical Ethics therein substituted for the former one, especially because it leaves the matter of consultation to the discretion, the honesty, and the humanity of the individual practitioner. And, although we decline to instruct our delegates to the State Society, we respectfully recommend to our representatives that they labor for the further simplification of the system of Medical Ethics until it shall not contain specific rules for the regulation of professional etiquette, but only authorize procedure against conduct plainly unworthy of a physician and a gentleman.

After a spirited discussion, in which Drs. Roosa, A. H. Smith, C. R. Agnew, and Fordyce Barker advocated the resolution, and Drs. Austin Flint, Sr., J. T. Adams, Gerrish, and Dwyer opposed it, the resolution was adopted by a vote of 147 to 60 against it.

BOSTON QUARANTINE REGULATION.—An order of the Board of Health, dated January 25th, requires that on and after that date, all vessels arriving at that port from Baltimore, Md., shall stop at quarantine for examination by the port physician, and that all persons on board not protected from smallpox by recent successful vaccination or revaccination or previous attack of the disease, shall be vaccinated or subjected to a quarantine of observation. No vessel arriving from Baltimore shall proceed, nor shall her cargo, or any part thereof, be discharged, nor any person be allowed to go on board or to leave her while in quarantine, without the written permit of the port physician, who is authorized and instructed to take such measures with regard to the vessel as, in his judgment, the health of the city may require.

BANQUET OF THE ALUMNI OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.—The twelfth annual banquet of the Alumni of the Medical Department of the University of the City of New York took place at Delmonico's on Wednesday, January 24th. Dr. T. R. Varick, of Jersey City, occupied the chair, with the Chancellor of the University, Rev. Dr. John Hall, on his right. At a business meeting held before the dinner, the following officers were elected:

President.—Dr. A. E. MacDonald.

Vice-Presidents.—Drs. W. A. Hammond, Gouley, W. E. Ford, S. J. Clark, G. C. Jarvis, and G. J. Fisher.

Treasurer.—Dr. C. D. Varley.

PHYSICIAN IN ORDINARY TO THE QUEEN.—DR. WILSON FOX has been appointed Physician in Ordinary to the Queen in the place of the late Sir Thos. Watson, and Dr. Owen Rees has been appointed Physician Extraordinary, in succession to Dr. Fox.

THE COMMUNICABILITY OF PHTHISIS.—The Collective Investigation Committee of the British Medical Association is now collecting trustworthy evidence from the profession as to the contagiousness of pulmonary consumption.

MICHIGAN STATE BOARD OF HEALTH.—The regular quarterly meeting of the Michigan State Board of Health was held at Lansing, Mich., on January 9, 1883. The Secretary made his report of work during the last quarter. The following resolution was passed:

Whereas, This Board has long been laboring for the restriction and prevention of contagious diseases in Michigan, which depend greatly upon the existence of such diseases in other States and countries; and as this Board has been able to trace several outbreaks of diseases in this State during the past year to immigrant travel, etc., therefore

Resolved, That this State Board of Health urgently request our members of Congress to endeavor to secure the passage of a bill to appropriate $25,000 for the remainder of this fiscal year, and thereafter, at about the same rate, to enable the National Board of Health to coöperate with State and local boards of health, and quarantines, in efforts to prevent the introduction of contagious diseases into the United States, and their spread from one State to another.

The invitation to hold a sanitary convention at Reed City, some time in the spring, was accepted.

Analyses of apple-butter and of the tinned-copper such as is used to make wash-boilers, were presented. The apple-butter is often made in such "copper" boilers when they are new. The acid of the fruit attacks the tin, which often contains lead in dangerous quantities, and it is said that the tin lining is eaten off in one or two times using for making apple-butter. The analysis of the apple-butter showed distinct traces of lead and tin, and a faint trace of copper. That portion of the apple-butter in contact with the cap of the fruit jar in which the apple-butter was sent to the chemist, gave very strong reactions for zinc, doubtless derived from the zinc-cap which screws down upon the mouths of "Mason" fruit-jars. The specimen of tinned-sheet copper used in making "copper" boilers and other kitchen utensils was analyzed and the "tin" was found to contain a large quantity of metallic lead; about two-fifths of the "tin" was lead. From one square foot of such tinned surface, there was obtained the equivalent of 150 grains of metallic lead. The ordinary clothes-boiler, such as is used in our kitchens, if made of this tinned copper, would have 2⅓ ounces of metallic lead on its surface, an amount that must have a serious influence on persons who eat acid fruits and juices boiled in such a vessel. Dr. Hazlewood and Dr. Baker were requested to make an investigation into the subject of metallic poisoning by utensils for cooking and storing food.

The committee on legislation reported on an act requiring the registration of plumbers. Hon. James Heuston, M.D., Senator, spoke on the subject of the examination of new dwellings before occupancy, and the following resolution was offered by Dr. Baker and adopted:

Resolved, That the committee on legislation, etc., and the committee on buildings, public, private, etc., jointly, be requested to take into consideration the feasibility of the suggestion made at this meeting by Hon. James Heuston, M.D., for a State law requiring all plans for new dwellings to be submitted to the local board of health for approval.

The special committee on sanitary conventions reported that a sanitary convention was to be held at Pontiac, on Jan. 31, and Feb. 1, 1883. Among the subjects to be presented are, papers on the limitation and prevention of typhoid fever, the relation of the medical profession to public-health laws, on toy pistols, the dangers in dirt, and on the contamination of well-water.

The following resolutions (two of them having been passed before) were reaffirmed:

Resolved, That there should be required of all who are to begin the practice of medicine in this State an examination as to their qualifications.

Resolved, That such examinations by the State should be restricted to questions in demonstrable knowledge, as distinguished from questions of mere opinion.

Resolved, That, as a public-health measure, these two resolutions be referred to the President and Secretary, with a request to do what they can to further the objects of the resolutions.

FRENCH SCIENTIFIC EXPEDITION.—The sum of 8,100 francs have been granted by the Municipal Council of Paris to M. GEORGES POUCHET, Professor in the Museum of Natural History in Paris, for the expenses of a scientific expedition to be made this year to the Azore Islands.

LECTURES ON SPLENIC FEVER.—DR. W. T. COUNCILMAN will deliver two lectures on "Splenic Fever, as Illustrating the Relationship of Bacterial Organisms to the Production of Infectious Diseases," at the John Hopkins University, January 30 and February 1, 1883.

NORTHERN MEDICAL ASSOCIATION OF PHILADELPHIA.—At the late annual meeting of this Association the following officers were elected for the current year:

President.—Dr. J. T. Eskridge.
Vice-President.—Dr. Henry Beates, Jr.
Recording Secretary.—Dr. J. G. Heilman.
Treasurer.—Dr. L. Brewer Hall.

ETIOLOGY AND PATHOLOGY OF TUBERCULOSIS.—DR. FORMAD, of the University of Pennsylvania, has accepted the invitation of the Clinical Society of Maryland to deliver a lecture on the above subject on February 2, 1883.

HEALTH IN MICHIGAN.—Reports to the State Board of Health, for the week ending January 20, 1883, indicate that diphtheria, erysipelas, measles, diarrhœa, typhoid fever, bronchitis, influenza, pneumonia, and tonsillitis have decreased in area of prevalence. There was no marked increase in any disease reported.

Including reports by regular observers and by others, diphtheria was reported present during the week ending January 20th, and since, at 19 places, scarlet fever at 21 places, and measles at 10 places. Smallpox was reported at Royalton, Berrien County (3 cases), January 17th.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT, U. S. ARMY, FROM JANUARY 22 TO JANUARY 29, 1883.

WATERS, WILLIAM E., *Major and Surgeon.*—Detailed as member of Army Retiring Board to convene at Fort Porter, Buffalo, New York, February 2, 1883.—*Par. 1, S. O. 21, A. G. O., January* 25, 1883.

HEIZMAN, CHARLES L., *Captain and Assistant Surgeon.*—Will be relieved from duty in the Department of the Columbia, and ordered to report to the Commanding General, Department of the South, for assignment to duty.—*Par. 10, S. O. 20, A. G. O., January* 24, 1883.

KILBOURNE, H. S., *Captain and Assistant Surgeon.*—Leave of absence for one month, with permission to apply for an extension of two months, is granted.—*S. O. 218, Department of Dakota, December* 21, 1882.

PRICE, CURTIS E., *Captain and Assistant Surgeon.*—Detailed as member of Army Retiring Board to convene at Fort Porter, Buffalo, New York, February 2, 1883.—*Par. 1, S. O. 21, A. G. O., January* 25, 1883.

SKINNER, JOHN O., *Captain and Assistant Surgeon.*—Will report in person, at the expiration of his present leave of absence, to the Surgeon-General for duty in his office.—*Par. 10, S. O. 20, A. G. O., January* 24, 1883.

TAYLOR, MARCUS E., *Captain and Assistant Surgeon.*—Will report in person, at the expiration of his present leave of absence, to the Commanding General Department of the East, for assignment to duty.—*Par. 10, S. O. 20, A. G. O., January* 24, 1883.

WOOD, MARSHALL W., *Captain and Assistant Surgeon.*—Will be relieved from duty in the Department of the East, at the expiration of his present leave of absence, and will report in person to the Commanding General, Department of the Columbia, for assignment to duty.—*Par. 10, S. O. 20, A. G. O., January* 24, 1883.

WOOD, MARSHALL W., *Captain and Assistant Surgeon.*—At expiration of present leave of absence, relieved from duty in the Department of the East.—*Par. 1, S. O. 15, Department of the East, January* 26, 1883.

WYETH, M. C., *First Lieutenant and Assistant Surgeon.*—Is relieved from duty at Fort Snelling, and will proceed to Fort Stevenson, Dakota Territory, and report to the Commanding Officer of that post for duty.—*Par. 1, S. O. 15, Department of Dakota, January* 18, 1883.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE-HOSPITAL SERVICE, OCTOBER 1 TO DECEMBER 31, 1882.

BAILHACHE, P. H., *Surgeon.*—Present detail continued until further orders, October 6, 1882. To proceed to Louisville, Kentucky, as inspector, October 13, 1882. Granted leave of absence for thirty days, November 10, 1882.

VANSANT, JOHN, *Surgeon.*—Granted leave of absence for twenty days, November 18, 1882.

HUTTON, W. H. H., *Surgeon.*—To proceed to Louisville, Kentucky, and assume charge of the Service, October 7 and 14, 1882.

MILLER, T. W., *Surgeon.*—To continue at present station until further orders, October 6, 1882.

WYMAN, WALTER.—To inspect keepers and crews of the Life Saving Service, October 5, 1882.

LONG, W. H., *Surgeon.*—To proceed to Detroit, Michigan, and assume charge of the Service, October 7 and 14, 1882.

MURRAY, R. D., *Surgeon.*—Having returned from service in the yellow fever epidemic in Texas, to report in person to the Surgeon-General, M.-H. S., December 4, 1882. Granted leave of absence until February 28, 1883, December 19, 1882.

FESSENDEN, C. S. D., *Surgeon.*—To proceed to St. Louis, Missouri, and assume charge of the Service, October 7, 1882.

PURVIANCE, GEORGE, *Surgeon.*—To inspect keepers and crews of the Life Saving Service, October 21, 1882.

SAWTELLE, W. H., *Surgeon.*—To proceed to New York, New York, and assume charge of the Service, October 7, 1882.

AUSTIN, H. W., *Surgeon.*—To inspect keepers and crews of the Life Saving Service, October 5, 1882.

FISHER, J. C., *Passed Assistant Surgeon.*—Present detail continued until further orders, October 6, 1882. To proceed to Alexandria, Virginia, as inspector, October 21, 1882.

HEATH, W. H., *Passed Assistant Surgeon.*—Granted leave of absence for fourteen days, December 28, 1882.

PORTER, F. D., *Passed Assistant Surgeon.*—To inspect keepers and crews of the Life Saving Service, October 5, 1882. To proceed to Evansville, Indiana, for temporary duty, November 21, 1882. To proceed to Charleston, South Carolina, and assume charge of the Service, December 21, 1882.

O'CONNOR, F. J., *Assistant Surgeon.*—To proceed to Norfolk, Virginia, for temporary duty, October 14, 1882. To rejoin his station (Detroit), November 4, 1882.

WHEELER, W. A., *Assistant Surgeon.*—Relieved of duty at Charleston, South Carolina, and placed on waiting orders, December 22, 1882.

ARMSTRONG, S. T., *Assistant Surgeon.*—To examine keepers and crews of the Life Saving Service, October 5, 1882.

BENNETT, P. H., *Assistant Surgeon.*—To examine keepers and crews of the Life Saving Service, October 5, 1882.

AMES, R. P. M., *Assistant Surgeon.*—Granted leave of absence for twenty-one days, November 23, 1882.

DEVAN, S. C., *Assistant Surgeon.*—To examine keepers and crews of the Life Saving Service, October 13, 1882. To inspect unserviceable property at the San Francisco Marine Hospital, October 20, 1882.

KALLOCH, P. C., *Assistant Surgeon.*—To inspect keepers and crews of the Life Saving Service, October 5, 1882.

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*